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THE FIRST YEARS OF PRACTICE: A COMMENCEMENT ADDRESS.

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NEW ORLEANS.

Since I first read Sir James Barrie's Rectorial Address at St. Andrews, I have never risen to speak to a group of college students without having at least one sentence from it come into my mind: that the best possible theme for such a talk would be the mess the speaker himself has made of life. In spite of that very shrewd comment, Sir James proceeded to offer advice, and I shall do the same, though less propitiously, I need not tell you, and for that reason in lesser quantity. At any rate, I make no apology for my performance; you have brought your punishment upon yourselves by inviting me to stand where I do.

Abernethy, addressing a group of medical men who were applying for fellowship in the Royal College of Physicians, I believe it was, exclaimed as he gazed on them, "God help you, gentlemen, what is going to become of you?" His successor, James Paget, studied the reply to that question, as did another English physician, Squire Sprigge, within our own day, and their answers are rather more hopeful than the despairing tone of the inquiry would imply. The majority of medical students become reasonably successful medical men. On the other hand, the percentage of outstanding successes is smaller than it should be, chiefly, I believe, because young men of great promise and real ability fail to make the proper use of their first years of practice.

For those same first years, I say without hesitancy and in all seriousness, are the most important years of your medical life. You have finished your education, in the sense of your formal instruction, though my opening piece of advice to you would be that you remember Locke's dictum, that education is not an end in itself, that its aim is simply to give us a relish of knowledge. At any rate, you have completed your years of formal study, and they have been, no matter what your intentions, more or less arduous. There has never been a royal road to an M. D., and the path is becoming increasingly steep and toilsome. You have spent your time and energy in the consummation of your aim, you have spent a great deal of money, and the University, as you are aware, has spent a great deal more on you. What are you going to do in the future to justify this heavy expenditure?

Well, I say again that what you are going to do in the future is very largely dependent upon what you are going to do in the next few years, which, in many ways, are the most important ones in your life. In them you will form the habits, set the standards, that are to determine your whole future career. You have already, of course, developed a certain technic of living. You are, I hope, serious in your purpose, orderly in your mental

processes, thoughtful in your considerations. If you are not, gentlemen, you do not belong where you are.

But let us be even more specific. And let us begin with the premise that nothing in the world, and certainly nothing in medicine, can be achieved without the will to work. You must do your labor in weariness, in inconvenience, in the face of lack of desire. You must have a real vocation to drudgery, and you must train yourselves to it in the first lean years, when patients will be all too few and when the temptation will be strong upon you to do nothing except wait for them. Yet this very Desert of Waiting, did you but realize it, is your day of opportunity. This is time which can never be replaced, and I would suggest that you use it in at least three special and definite ways, in reading, in study and in reflection.

I need scarcely remind you that you cannot expect to keep up with your profession unless you read widely and read constantly. You have touched only the hem of the garment of knowledge, and you are serving a mistress which does not stand still. Read the old and the new books, read the general and the special journals, keep up with the advances of medical science and the progress of medical art, and read, as quaint old Thomas Browne puts it, "with one eye for that which is laudable in others." The library will be your guide and compass in many a bewildered hour, and the habit of regular reading, once formed, is one which will never forsake you and which you will never willingly forsake.

In the second place, use some of your time for definite study. Set for yourselves specific problems, particularly specific problems in the laboratory, though I do not intend that you should become what someone has called "tubular-visioned," or that you should forget the clinical side of your profession. But modern medicine, and particularly modern surgery, is founded upon pathology, and Flexner is quite correct when he says that the only difference he has noticed between the scientifically and the practically trained physician is that the former is more likely to cure his patient. Spend in the operating room, the clinic and the laboratory the hours you may be tempted to spend in idleness, spend them in study and observation, in working as well as talking about working. It is an all too common illusion that conversation on that subject is equivalent to the act itself.

Finally, cultivate the habit of contemplation, which far too few of us possess in these hurried modern days. The art of withdrawal from one's fellows is a lost art, and yet I know of no practice more helpful in the life of a busy physician. Learn to think, to digest what you have read and heard and observed, to correlate your unrelated observations, to face your problems, to analyze your difficulties, to take stock of your successes, and again you will have manifold rewards for the hours you have so spent.

Your first problem will naturally be where you are going to practice. Well, if you come from a small town, if your people are there, and your associations, if your heart bids you return, by all means do so. Quite aside from the fact that the cities are over-supplied with physicians and the rural communities under-supplied, there is no reproach to being a physician in a small town, provided you do not let yourselves be bounded mentally and medically by small town limits. You need not be. You can live a useful life in a small community, you can keep up with your profession, you can serve suffering mankind there quite as well as in a large city, perhaps better, and if your mousetraps are good enough, the world will find you out and beat its path to your door.

You have probably already received so many admonitions on the subject that it is with some trepidation that I advise you again not to specialize too soon, though I would limit my remarks more particularly

to the practice of surgery. I am not the only surgeon who, remembering his own long apprenticeship to that most trying of all medical arts, stands appalled at the temerity with which young men, very young men, young in years and lacking what Billroth so well terms the hesitancy of experience, enter upon operations before which men grown gray in the service would gladly hold their hands. If you elect to be surgeons, remember that a moral obligation rests upon you to prepare yourselves adequately for your assaults upon the human body. Your degree may give you the legal right, but under heaven you have no other, to take the knife and cut until you know what you are doing, and, even more important, until you know why you are doing it. You may be successful sometimes, indeed you may be successful often, but eventually, like Dogberry, you will have your losses, and you will carry that upon your consciences and upon your hearts which a lifetime of good works cannot rid you of. The technic of surgery may be simple, but there is nothing else simple about it.

Under our present imperfect system of medical education you have had in your college years all too little to do with the patient. Now you are going to meet him and to treat him, and I hope you will write it upon your hearts that your first business, no matter what branch of medicine you may elect to follow, is with him. You have been educated to cure—which means, let me remind you, in its original signification, to care for—you have been educated to cure sick men and women, God's poor, as the old mediaeval writers were wont to call them, and your concern must ever be with them. Do not, I beg of you, look upon these ailing mortals merely as cases or as symptom complexes. They are human beings whose lives often, whose usefulness and happiness more often, depend upon what you are going to do for them. Lord Moynihan has said many wise things, none wiser than that relief from suffering is often quite as important as rescue from impending death. The healing of the sick has been the whole purpose of your medical education, and I hope you will never forget it. Be as scientific as you please, your patients will be the better for it, but look beyond the test-tube and the roentgen-ray, make use of the special senses God has given you, and remember, above all, the humanities of medicine. When I see how often they are flouted, these humanities that, after all, are the very bread and breath of life, I wonder if we do not deserve the dying strictures of old Clemenceau, who characteristically cleared his sickroom of physicians on the ground that they were all donkeys.

I am sure you need not be warned, for you must have realized it before you ever decided upon your career, that the men who have grown rich in the practice of medicine are few. Sir Andrew Clark said that he strove ten years for bread, ten years for bread and butter, and ten years for cake and ale, and I would say that those proportions still hold. Medicine is a profession whose rewards are often deferred and long deferred, and when they do come, they are not always in coin of the realm. Sir William Osler, speaking to a group of entering medical students, had this in mind, I am sure, when he said to them, "If you look forward to a lucrative practice in medicine, go home. But if you enter the profession in exactly the same spirit in which a missionary leaves for a foreign field, believing that in it you can best use your talents for your fellowmen, we welcome you." Small wonder that it was the same Sir William, as illustrious for his gentle courtesy as for his surpassing scientific knowledge and medical skill, of whom it was said that he never left a sickroom without leaving renewed hope behind him.

It was the same intangible rewards of medicine of which Stephen Paget was thinking when he wrote, "To be wanted by men and women, to come natural to

them in time of trouble, is a very different matter (he has been speaking of financial rewards), and may fairly be called a career." I would recommend to you that little volume which he calls "Confessio Medici," in which he says this, and very many other wise and lovely things. In an age that is steeped in materialism, that is in danger of forgetting the finer spiritual values, it is refreshing to read these reflections of a physician who set his eyes steadfastly towards the stars.

For the same reason I would recommend to you another book, the biography of Sir William Osler, written with loving care by Dr. Harvey Cushing, himself as distinguished in surgery as in literature. Then, when you have read the record of that full and gracious life, turn to the writings of the man himself, the writings of a true humanist, of a wise physician, of a great-hearted gentleman, and learn from him, as I could not hope to show you, the real rewards of medicine.

These are rambling reflections, gentlemen, but I hope you will read into my words more than I have been able to express in them. I have given you a considerable amount of advice, to most of which, I am quite sure, you will pay no heed at all, at least until the bitter school of experience teaches you the correctness of it. I say this without sense of complacency, for I learned it there myself, and I would save you, if I could, from the mistakes I have made. You will make your own, in spite of my warnings, but I shall be content if I have merely shown you, from my vantage point further along the road, that in spite of its wearisome toil, its grave decisions and its weighty responsibilities, there is opportunity for usefulness and contentment in the career which you have chosen, and if I have made you feel that in our old relation of teacher and student, in our new relation of fellow-physicians, my good wishes for your success and for your real happiness are with you always.

MALTA FEVER.*

C. L. ESHLEMAN, M. D.,

NEW ORLEANS.

While the title of this paper is Malta fever, denoting, as it does, a geographical distribution of the disease, it should at once be stated that the disease has become so widespread that such a designation should be supplanted by a more satisfactory one. Mediterranean fever is equally bad. Neapolitan fever, rock fever of Gibraltar, Cyprus fever, Bruce's septicemia, septicemia melitensis are objectionable for various reasons. On account of the wave like character of the febrile attacks; undulant fever, a name formerly applied to the disease in 1897, was recommended as a more satisfactory term by the International Congress of Medicine in 1913 and the disease has been described more commonly under that name during recent years.

Hyppocrates described a disease which was probably Malta fever. During the eighteenth century fairly complete and accurate descriptions of the disease appear in the literature. On July 9, 1887, Surgeon Captain David Bruce, an English Army Medical officer, discovered the specific organism, the *Micrococcus melitensis*, which he isolated from the spleen. He was later able to grow it and reproduce the disease in monkeys. In 1897, Wright and Smith developed an agglutination test, similar in its application to the Widal test for typhoid, which is still used as a diagnostic aid. In 1904 an English Commission was appointed to study the disease in Malta and the Mediterranean section.

After three years of study by this Commission it was shown that about 50 per cent of the goats, which supply practically all of the milk consumed in Malta, harbor the organism and about 10 per cent were

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actually execreting it in their milk. Monkeys fed on this milk almost invariably developed the disease. In 1905 a small epidemic broke out on a steamer exporting 65 goats from Malta to the United States. Almost everyone who drank the milk of these goats became affected. Up to this time there was nothing to indicate that biting insects, inhalation of infected dust, or mere contact caused transmission of the disease and it was the belief that nine-tenths of the cases of Malta fever which occurred in Malta were due to drinking of milk from goats infected with *Brucella melitensis*.

After the establishment of these facts, a rather long period appears to have elapsed until Alice C. Evans, a bacteriologist of the U. S. P. H. S., lent new impetus to the study of this interesting disease by demonstrating that the organism of contagious abortion in cattle, the bacillus of Bang, was the same organism as the *Micrococcus melitensis* of Bruce. While the *Brucella melitensis* was known to be pathogenic to man it was not thought likely before this time that the *Brucella abortus* causing contagious abortion in cattle was capable of producing disease in human beings. In 1924, Evans suggested that it was. She furnished further proof of her contention by isolating the *Brucella melitensis* from the blood of a human case of undulant fever and subsequently by its intravenous inoculation causing an abortion in a pregnant heifer. In this same year, 1924, Keefer reported the first case of human infection with *Brucella abortus* in this country. The clinical course was indistinguishable from Malta fever. In 1926 Carpenter and Merriam isolated the *Brucella abortus* from two cases of undulant fever in New York and caused two heifers to abort by inoculation with these cultures. Further confirmation of these observations have not been lacking and during the last five years ample proof has been brought forth to show that:

1. The infection of goats with *Brucella melitensis* in Malta has its counter part in this country by a very extensive infection of cattle by the so called *Brucella abortus* causing contagious abortion in cattle.

2. *Brucella melitensis* is probably the same organism as *Brucella abortus*.

3. Human infection with undulant fever in this country is usually the result of ingestion of milk from dairy herds infected with *Brucella abortus* just as Malta fever was the result of similarly infected milk from goats in Malta. It is probable that hogs are also infected and possibly the handling of infected meat in large packing houses may be an additional means of infection, but this seems rather unlikely at this time and infected milk must be considered the chief source.

There has been a steady increase in the prevalence of undulant fever in this country during the past few years. Last year 367 cases were recorded in the U. S. No doubt many more went unrecognized and unrecorded; thirty-six cases have been reported at South Bend, Ind., 3 cases in Pennsylvania, 31 cases in Michigan. An epidemic infecting 25 students in Richmond, Ind., has been studied. In Iowa 125 cases were recently analyzed; 63 cases in and about Dayton, Ohio, have recently been reported. Several cases have been seen in the Charity Hospital here in the past few years. Two cases have been in the Touro Infirmary during the past 6 weeks.

The incubation period is said to vary between 6 and 15 days. An intermittent or remittent fever of several weeks duration, not proven to be due to any other cause, should arouse one's suspicion of undulant fever. The onset is rather insiduous with symptoms common to any infection, namely; chilliness, fever, sweats, headache, pains in back and limbs. Not infrequently the patient continues at work complaining only of malaise. The amount

of prostration is not great even in the presence of high fever. A feeling of well being in spite of fever 102 degrees of 103 degrees has been commented upon and contrasted with that of typhoid where symptoms of prostration are much more severe. The mild delirium of the typhoid state is rarely seen. Headache when the temperature reaches its crest and loss of appetite are common. Pains in the back and limbs and sometimes in the joints simulating rheumatic fever are frequently present. A rather persistent unproductive cough without apparent cause except pharyngeal congestion was a prominent symptom in a case recently seen by me. The sweats are said to have a curious sweetish odor. The fever usually shows a morning intermission or remission with an afternoon rise; after weeks or months of fever a period of normal temperature may occur for a variable period followed by a secondary rise. This may be repeated for long periods. In protracted cases the patient develops a secondary anemia and complains of weakness. Constipation is the rule but sometimes diarrhea has been noted. Intestinal ulceration is extremely rare, but has been reported with hemorrhages. Abdominal pain severe enough to cause laparotomy has been reported. Prostatitis and orchitis have been associated in a few cases. The diagnosis is difficult unless the disease is kept in mind and proper laboratory investigations made in all continuous fevers of obscure origin. A diagnosis should not be made on the temperature chart alone as frequently the fever does not run a typical undulant course. In all suspected cases blood cultures should be made. The organism seems fairly difficult to grow in culture. One observer records 22 positive cultures in 125 positive cases. Another found 5 positive in 63 cases. The cultures should be kept under observation for prolonged periods.

An agglutination test similar to the Widal in typhoid is at present an important and almost essential aid in diagnosis. The reaction is rarely positive before the second week. In low dilutions 1-20 a positive diagnosis should not be made. Agglutination in 1-80 is considered reliable evidence of the disease if associated with clinical symptoms. Positive agglutination has been obtained in one case in a dilution of 1-20480. The higher the dilution the more reliable the reaction becomes. Reliable cultures of both *Brucella abortus* and *Brucella melitensis* should be used in making the agglutination tests.

Additional proof of the disease exists when the organism can be cultured from the urine. Recently Giordano pointed out that the diagnosis of undulant fever in man was often difficult because of the indefinite clinical picture, the low percentage of positive blood cultures and the fact that the agglutination reaction is not always present. He developed a vaccination test which seems almost specific—0.2 CC of a killed suspension of *Brucella abortus* were injected intracutaneously in 25 cases of proven undulant fever producing a positive local reaction in all. In 100 controls 99 per cent were negative. The reaction appears in 12 to 48 hours being a local induration with redness at the site of the injection, sometimes progressing to a granulomatous lesion with grayish center resembling pus. The reaction lasts from 10 to 30 days. Its value is yet to be determined but reports so far are encouraging.

The prognosis in undulant fever is not bad. Cases have run fever from several weeks to 3 years. Three months is a fair average. The mortality is usually 2 per cent to 3 per cent. In some outbreaks a 13 per cent mortality has been recorded.

Prophylaxis lies in the pasteurization of milk and dairy products. It is said that 25 per cent of the dairy herd in this state are infected. If this is the case the disease will rapidly become a serious pub-

lic health problem not even secondary in importance to bovine tuberculosis. Health authorities and milk societies are now studying conditions in many sections of this country.

Treatment of the disease is purely symptomatic. No specific serum or vaccine has yet been shown to be beneficial. Urotropin, mercurochrome, acriflavine and other antiseptics have been of no avail. Rest, good hygiene and treatment directed against the secondary anemia and weakness are indicated. Disinfection of stools and urine is advisable.

CASE REPORT.

A recent case seen by me was that of a white man of 42 years of age, a merchant by occupation residing in South Louisiana. He was admitted to Touro December 25, 1929, complaining of dry cough, malaise in the afternoon, chilliness and fever and sweats for 2 months. He had never discontinued his work or been confined to bed except on two occasions he remained in bed one day and two days on the advice of his physician because he found him with fever of 102° or over. He stated that he usually felt well in the morning but by late afternoon he became fatigued while at his store and knew he was not himself and was conscious of some fever. A dry cough bothered him considerably and he sweated more than usual in the afternoon. He complained of nothing else. He denied any pain or loss of weight or any other symptom whatever. He had a good appetite, his bowels were regular—there was no apparent loss of weight.

His family history was good. Mother died of Hodgkins disease.

Habits were excellent. No genito-urinary or venereal infection. His general physical examination was completely negative in every way. A very soft systolic murmur was heard only at times but without other signs suggestive of a subacute bacterial endocarditis. This diagnosis was the only one thought of but could never be confirmed by symptoms, course, or blood cultures.

On admission red count was 5,250,000; hemoglobin 90 per cent; leukocytes 7,200; neutrophils 63; lymphocytes 33; large mononuclears 4. Urine and Wasserman were negative. No plasmodia found. Widal negative; blood culture negative.

The fever continued as shown in the chart but the patient continued to feel well and complained of nothing except the dry irritating cough and night sweats. On January 4, 1930, a positive agglutination was secured with micrococcus melitensis in dilutions of 1-120. Later the test was confirmed in dilutions as high as 1-900. On January 14, a positive agglutination with Brucella abortus in dilutions of 1-1200 was secured and in 1-800 with Brucella melitensis.

Slight anemia developed, the red count showing 4,270,000, hemoglobin 82 per cent, and then 3,630,000, hemoglobin 78 per cent. The highest white count was 7,200, the lowest 4,550. Highest neutrophil count 68 per cent; highest lymphocyte count 43 per cent. Repeated search for plasmodia was negative even on centrifugalized specimens. Additional blood cultures were negative. A nose and throat consultant found nothing to explain his fever. A genito-urinary consultant also reported a negative K U B examination. Roentgen-rays of the heart, lungs and teeth were all negative. A thorough gastro-intestinal examination was negative.

On January 9 the vaccination test described by Giardino was done—namely, the intradermal injection of 0.2 cc. of a killed culture of Brucella melitensis. Next day a marked reaction was noted, the indurated erythematous area being as large as a 5-cent piece. Next day the pustular appearing dot in the center was present. The reaction faded very gradually and was visible for 10 days. The saline control was negative. A similar test was performed on two other patients with fever in the hospital at the time and was entirely negative.

He was finally permitted to return home after 4 weeks of observation with no material change in his condition, still having fever as shown by the chart but feeling fairly well and very desirous of being permitted to be up and about. I was informed that he was still having fever 3 weeks after discharge from the hospital.

N. B.—Discussions follow Dr. Wirth's paper on Psittacosis.

NOTE ON PSITTACOSIS.*

H. DICKSON BRUNS, M. D.,

NEW ORLEANS.

Dr. Samuel Logan was Professor of Anatomy in Tulane University from about 1865 to the time of his death in 1893. During my medical course, partly under him in 1878-80, and after I began practice in 1883, I was constantly in and out of his house, especially as our families were connected.

For a number of years Dr. Logan's family owned a green talking parrot, which one fine day grew ill and died. This was somewhere about the year 1889 while I was pathologist of the Charity Hospital. I was given the dead bird, took it to the laboratory and dissected it. It was not difficult to see that death had been caused by pneumonia and I so reported to Dr. Logan. I knew less than nothing about psittacosis. Not long afterwards, however, I saw, I could not for the life of me now say where, mention of this disease called from the Greek name of these climbing birds because they are liable to it. As it is said to have been recognized in Paris in the seventies it was probably in some French publication. Of course I then corrected my diagnosis.

I also made sections of the lungs of this parrot; doubly stained them with carmine and hematoxylin and left them in the large collection of slides kept in a special cabinet in the pathological department of the hospital when I quit the pathologistship in 1893.

*Read before the Orleans Parish Medjcal Society, February 24, 1930.

PSITTACOSIS.*

A REVIEW.

WILLARD R. WIRTH, M. D.†

NEW ORLEANS.

In view of the several recently reported cases of "parrot fever," or psittacosis, in humans in several portions of this country, and the newspaper comment thereupon, a resume of the available information on this disease might be of interest. Though first described more than fifty years ago, the references in the literature are not numerous, and the subject is apparently still open for further investigation and confirmation.

DEFINITION.

The term psittacosis is derived from the Greek "psittakos," meaning parrot, and is applied to an epidemic disease of parrots characterized in this bird by symptoms of general debility, loss of appetite, and chronic enteritis with a high mortality. The disease may be transmitted to humans from parrots sick with the disease, and the human disease is known by the same name. In man, however, it has an onset and course similar to typhoid fever, associated additionally with signs of a severe atypical pneumonia.

HISTORY.

The disease was first reported in Switzerland in 1879 by Ritter, though it is not clear whether he described the disease in parrots or in man. Epidemics were later reported in Germany, France, England, and in America. In 1892-1893 the condition first assumed clinical importance during an epidemic in Paris. Because of the mortality in this epidemic, Dujardin-Beaumetz was commissioned to study the disease, and he arrived at the conclusion that it was a grippal infectious pneumonia. Peter regarded it as a typhoid of parrots transmitted from the bird to man. The

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mortality in this epidemic is reported to have been 45 per cent. The epidemic was also thought to have been an unusual manifestation of influenza, probably because of the previous pandemic of influenza in 1889-1890. It is to Dubief, a Frenchman, that credit is given for drawing attention to the association of cases of the disease with sick parrots.

During this Paris epidemic, Nocard, in 1893, isolated a bacillus from the bone marrow of the humerus of a parrot dead from the disease. He named this organism *Bacillus psittacosis*, and proved its pathogenicity for parrots, pigeons, fowls and laboratory animals.

In 1895, Palamidessa isolated the organism from five human cases in one family in Florence. In 1896, Gilbert and Fournier isolated an organism similar to the bacillus described by Nocard from human cases as well as from parrots. Perry has studied the relationship between *Bacillus psittacosis*, *Bacillus enteritidis* and *Bacillus paratyphosus*. Other investigators have failed to find the specific organism in suspected human cases.

A local epidemic in Wilkes-Barre, Pennsylvania, in 1917, has been fully reported and studied by McClintock.

Guilland, in 1924, described two cases in women in England. In these cases the diagnosis was not confirmed bacteriologically. In 1929, Thomson reported four cases in England and claims to have been the first to recover the *Bacillus psittacosis* from human cases in that country. Sailer reports a case in Pennsylvania in 1929, though it is also without laboratory evidence.

ETIOLOGY.

The possibility of the transmission of the disease from sick parrots to humans cannot be denied. The organism is present in the dejecta of the parrots, which in turn soils and contaminates their feathers and beaks. Individuals fondling these sick parrots become infected, as might also those who clean the infected cages. The practice of nursing the parrots and feeding them from the mouth is also blamed as a possible source of infection. It has been shown that the bacillus retains its virulence for a long period of time in the dejecta and on the feathers.

Bacteriological findings are unconvincing and contradictory. References are made to reports of similar house epidemics of atypical pneumonia which were entirely unrelated to any disease in parrots.

Nocard has advanced the theory that *Bacillus psittacosis* merely prepares the patient for a secondary pneumonia.

The statement is found that the disease is never transmitted from man to man. Others state that the occurrence of the disease in members of the same household indicates that the disease is transmitted between humans, and that man is very susceptible. It is also rather remarkable that relatively few individuals acquire the infection, although ample opportunity is offered in the case of bird fanciers and individuals with parrots for pets. Perhaps this is not as real as it is apparent, the condition may not always be recognized.

SYMPTOMATOLOGY.

Parrots. In parrots, the disease is limited to the intestinal tract. The birds are droopy, listless, sleepy, and lose their appetite. They are hot, having fever, have a profuse mucus nasal discharge, and develop a severe diarrhea. The feathers are ruffled and fall easily, and there is a constant craving for water. There is rapid wasting, and the condition is usually fatal.

Man. In human cases the disease resembles typhoid fever with pulmonary complications. The incubation period is given as from 7 to 25 days. Dubief gives the average incubation period as from 7 to 10 days. The onset is variable, in some cases being sudden with a chill, as in pneumonia, and in others being gradual with symptoms of headache, malaise, photophobia, anorexia, nausea, lassitude and

weakness, and constipation. In some cases there is an initial diptheroid stomatitis with enlargement of the submaxillary glands, and sometimes peribuccal edema. This type is thought to be due to the habit of feeding the sick birds from the mouth. The temperature rises rapidly, reaching 102° to 104° F., and is continuous with daily remissions. The pulse rate is correspondingly rapid, from 100 to 120 per minute. After 4 or 5 days there is cough with expectoration of a muco-purulent or bloody sputum. The respiratory rate increases and fine moist rales may be heard throughout both lungs. The tongue is dry and furred, the breath foul. There are no marked abdominal symptoms, and there may be either diarrhea or constipation. The spleen may be enlarged and petechiae or rose spots have been described. The patient is dull and stupid, and there may be some delirium. When uncomplicated, the duration is from 15 to 20 days, and the prognosis is favorable, though with pneumonia, which may be either labor or lobular, the prognosis is grave. In the favorable cases the temperature falls by crisis usually in about 10 to 14 days. There follows a profound prostration with a prolonged convalescence. The mortality is given as from 35 to 40 per cent, being high in elderly people and low in children.

BACTERIOLOGY.

The organism, *B. psittacosis*, is a motile, non-spore bearing bacillus. It is rod shaped, measuring from 0.4 to 0.6 microns wide, and 1.0 to 1.5 microns long. It is Gram positive in straining reaction, though later becomes Gram negative in culture. It is closely related to the typhoid and paratyphoid group, and has been included in the Salmonella group, principals of which are *B. enteritidis* (Gaertner), *B. paratyphosus* and *B. aertrycke*.

Nocard originally described the organism as a short, stout, motile flagellated rod, rounded at the ends. It produced no spores, was aerobic, optionally anerobic, non-chromagenic and Gram negative. It fermented dextrose and not lactose. Milk was not coagulated, and gelatin was not liquified. The colonies on agar-agar resembled those of *B. typhosus*.

Perry has isolated a similar organism from the heart blood, spleen, and intestinal contents of parrots sick with the disease.

Thomson described the characteristics of the organism which he isolated from a human case as follows: It produced a slow growth on the usual solid media and on potato. There was slight hemolysis on blood agar. In nutrient broth a small petal-like growth appeared on the surface. There was no liquefaction of gelatin and no anerobic growth. In pure culture it was a short bacillus with polar staining ends, early Gram positive, and after 48 hours growth in vitro was Gram negative. It produced acid and gas in glucose, and acid in mannite. There was no reaction with lactose, saccharose or dulcite. Litmus milk was rendered acid at first but in 24 hours became alkaline.

McClintock claims that the organism is pleomorphic, but no other work has substantiated this opinion.

PATHOLOGY.

In parrots, post-mortem examination shows evidence of a severe enteritis associated with cloudy swelling of the spleen, liver and kidneys. The bacillus is found in the bone marrow, blood stream, viscera and intestinal contents.

In man the outstanding pathology is in the lungs. Autopsy shows a general infection in the lungs with an acute lobular or lobar pneumonia. There is some dissolution of the blood. The spleen is soft, the heart flaccid and yellow, the kidneys are enlarged, and there is evidence of fatty degeneration of the liver.

The organism has been isolated from the blood stream of some human cases. In other reported cases the organism has not been isolated and the failure to find Nocard's bacillus has been explained on the

ground that the organism has been destroyed by secondary invading organisms.

DIAGNOSIS.

The diagnosis is apparently difficulty and often inconclusive. It seems to rest to a considerable extent upon the knowledge that the patient has been in contact with a sick parrot. Otherwise the symptoms and signs are so like influenza, typhoid or an atypical pneumonia, that any other diagnosis does not suggest itself. Perhaps many cases are unrecognized and diagnosed incorrectly. Certainly the laboratory findings are vague and of little value in a confirmatory way, unless the organism can be isolated, or positive agglutination tests obtained. When it is known that a patient sick with a febrile disease associated with atypical pulmonary findings has been exposed to a sick parrot, the diagnosis of psittacosis should suggest itself. This suspicion is especially warranted if there is a history of a similar illness in several members of the same household.

The coryza and conjunctivitis commonly seen in influenza are usually absent. Also the leukocyte count is usually normal, or practically normal, in contradistinction to the leukopenia seen in typhoid fever.

The serum agglutination tests are not uniform. Many reported cases are entirely lacking of confirmatory laboratory evidence. In others, for various reasons, the serum agglutination tests have not been attempted, so that there is not much definite information on this score. Sometimes a strongly positive Widal is present, and the diagnosis of typhoid is made. In other cases a Widal reaction is positive but only in the lower dilutions. Positive agglutination of the organism with the serum of human cases has been reported in dilutions as high as 1-50 and 1-10, though usually the agglutination does not occur beyond 1-60.

TREATMENT.

The treatment is entirely symptomatic and similar to that of typhoid fever. Immunization by vaccine has been suggested.

As a prophylactic precaution, certainly all sick parrots should be regarded with suspicion, and contact avoided or a quarantine of the sick birds practiced. Care should be taken to insure the proper disposal of the dejecta and fallen feathers of the birds, and the cages should be thoroughly cleansed. Shipments of parrots into this country should be examined and kept under observation for at least one week before sale or disposal, to determine the presence of any infected birds, manifested by the development of the typical symptoms. Human cases should be isolated since there is some doubt as to whether the disease is transmitted between men.

At the present time, the disease is widespread among the parrots and parrakeets in South America and Argentina, and the proximity and contact of this port with Latin American countries should necessitate our constant attention to this possibility of infection.

SUMMARY.

1. Psittacosis is an epidemic disease of parrots, transmitted to man.

2. The disease is characterized in man by continuous high fever, prostration and atypical pulmonary findings, with relatively high mortality.

3. The diagnosis is difficult and uncertain and is usually suggested by the history of contact with a sick parrot.

4. Laboratory findings are incomplete and there still exists some doubt as to the absolute specificity of the supposed causative organism *B. psittacosis* of Nocard.

5. Further complete study of human cases suggests itself in order to clarify the subject.

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DISCUSSIONS.

Dr. Rucker (New Orleans): I think we have here a group of diseases which illustrates the importance of the public health idea. About twenty years ago, we decided that there was a sharp line of demarcation between curative medicine and preventive medicine. That was the idea at that time because the public health man could go ahead and work on the diseases which the clinician had marked out. We now have these problems reduced to such a point where it is an engineering problem and the public health man realizes that for a starting point, he has got to get back to the clinician, that is, to the bedside.

Here we have a group of diseases resulting from contact with lower animals, or they may be acquired by ingestion—all three may be acquired by ingestion. Dr. Cannon forgot to mention the outbreak in Virginia three years ago, as the result of eating rabbits, and the research of Francis which proved to be tularemia acquired by ingestion. These diseases may also be acquired by inoculation. In the work done by Kennedy it has been proven that Malta fever may be transmitted by the mosquito, although we know that is not the usual way. Tularemia certainly is transmitted by inoculation, and several cases of psittacosis suggest this point.

We think of these diseases as rare diseases. Enough work has been done to show that Malta fever is not rare. It has been reported in forty States and tularemia in thirty-eight States. So if all these cases were reported we would realize that these diseases are not rare. As far as psittacosis is concerned, it is not rare in proportion to the number of people who have parrots. They certainly indicate that as a starting point we should make a careful study of all cases of fever. Tularemia and Malta fever are bacterial infections. We think psittacosis is a bacterial infection. It is true that the bite of such insects as the tick and the deerfly transmit tularemia.

As to immunity, tularemia produces lasting immunity. Malta fever does not. As for psittacosis, I do not know.

Malta fever, as Dr. Eshleman says, is not quite undulant fever. The other day a case of Malta fever was reported to the Massachusetts State Board of Health as a case of indolent fever, thus making it an occupational disease. There are three recognized forms: melitenses, abortus, and suis, which comes from hogs.

Malta fever is transmitted by the ingestion of milk from goats and cows, and by the ingestion of meat from goats and hogs. We know that it is transmitted by inoculation by mosquito. Experiments with the urine of an infected goat, subsequently inoculated into other goats, known to be free of the disease, produced disease in the goats, but not in monkeys. Man is supposed to be about midway between goats and monkeys in susceptibility to disease.

Coming to the question of the prevention of the disease, the first thing is to eliminate the disease from live stock. Here we must call upon veterinary science. I believe public health men have been too chary in taking up with the veterinarians. We should get cooperate with them and get them to help us. We known this, that examination of herds will permit us to take out of the herds all infected animals. Calves may be isolated and cured, then put into well herds. This means careful examination of all live stock. Pasteurization of milk is indicated. These organisms can be killed by bringing milk to a temperature of 56 to 58 degrees cent. Sixty degrees cent. will render milk safe. As far as the doctor is concerned his big job is to report cases so that the public health authorities may know where they are; to handle cases from a hygienic point of view and not to discharge the patient until the urine is free of organisms.

Tularemia is transmitted from animals to man by the deerfly and tick and also from animal to man by ingestion. There are cases where the disease has been transmitted from man to man. Tularemia is very frequently contracted in the laboratory and in the performance of necropsies;

also among market-men and market-women and people who are skinning game and get their hands covered with the blood of these animals. Any rabbit killed by a boy with a stick should be discarded, as any rabbit sitting still is apt to be sick. They should be shot on the run.

In the infected areas dipping of cattle to get rid of ticks is a very excellent idea since these ticks are brought into man's environment and infect him. A good way to remove a tick is to grease the ventral surface of the tick. This closes the respiratory spericles and causes the tick to drop off. One way to clear the land of ticks is to drive unshorn sheep through it. These should be dipped about every thirty days. The extermination of the jack-rabbit is also necessary. Laboratory men and market-men should be required to wear gloves which are impervious. Rubber gloves are preferable.

Psittacosis is the result of keeping a perfectly useless thing around the house. Perhaps parrots are ornamental, but they are utterly useless and there is no excuse for having them. Whether or not the disease is due to the ingestion of parrot feces, I do not know.

Laboratory infections are common. Man to man infections are common; that is what killed Daniel Evans, Stokes and Anderson and infected Armstrong and others. Naturally, since this is a disease of parrots it means that we should keep away from parrots. The President has issued an order forbidding the importation of parrots. Again we come back to the public health point of view. Physicians should report psittacosis cases.

Dr. C. W. Mattingly (New Orleans): I had the good fortune of admitting to Charity Hospital five of the seven cases of the ulceroglandular type of tularemia presented by Dr. Cannon. The outstanding sign that led me to consider tularemia was marked enlargement of the glands draining the area of ulceration; the enlargement being out of proportion to that associated with the more common causes of adenopathy. The epitrochlear glands often attain the size of a walnut and the axillary that of a lemon.

From a surgical standpoint, the primary lesion, which is a granuloma, should not be incised. The glands should be incised only when there is definite suppuration with a tendency to pointing. It is claimed that an incision of the primary lesion, or removal of any involved gland, may flare up the original infection. No case of tularemia has ever been reported resulting from incising a suppurating gland.

Dr. M. Earle Brown (New Orleans): I wish to congratulate Dr. Bruns for having recognized a disease of parrots in 1889, which is evidently the disease now known as psittacosis. It is especially of interest to have the Society take cognizance now.

Some of the papers have given us much to think about this special disease. It has been my pleasure to visit the tropics—I mean every seaport of the Caribbean Sea and every seaport of the South Atlantic. I have never found in any of these seaports, places where the natives used parrots as pets. The natives kept the smaller bird or parakeet, which is the size of our mocking bird. I believe, but I am not positive, that the American Navy prohibits parrots upon its ships. Parakeets are acceptable and the blue jackets may bring these birds aboard the battleships. (There is a Naval Medical Officer present who might answer that question.) It may be possible that these people in the tropics realize that there is some danger from the parrot and they keep the parakeet as a pet instead. I did not have the privilege of asking Dr. Rucker whether this disease has been found in the parakeet as well as the parrot, but I would like to know.

Dr. Bernadas (New Orleans): I would like to suggest that the discussion tonight is not purely academic. We have tularemia here. I permitted to leave the bed today, a man who a month ago was killing and skinning rabbits. He was in bed almost a month; temperature went to 104 and 105 degrees, large axillary and elbow gland in right arm.

Tularemia is here. I hesitated about discussing this case because I did not report my two cases to the Board of Health.

Dr. H. N. Blum (New Orleans): I want to say a few words, with two purposes in mind. One is to mention a case of tularemia which Dr. Lanford and Dr. Rucker know, a case in my clinic about two years ago. The man was a farmer living in north Louisiana. One day he killed two rabbits with a stick and he gave them to his dog to eat. He skinned them and the possibility may have been

that they were sick. Within a period of a short time he developed high temperature and other symptoms of acute infectious disease, and finally conjunctivitis in his left eye. He went to Baton Rouge and consulted an oculist who told him he did not know what it was. He came to Touro. I had never seen a case of that character. Because I thought it was squirrel plague conjunctivitis I asked if they would not take him into the U. S. Public Health Hospital and try serological tests. He was tested positive. Miss Isom, who was one of our artists, had the opportunity to make picture of this several days after he was under observation, after the conjunctivitis had begun to clear up.

The other circumstance which I want to mention was that last year, November, 1929, I was in Vienna and one day in Professor Lindner's clinic, his first assistant demonstrated a case of conjunctivitis which he had called tubercular. Next day, Professor Lindner brought that same man before the class and called it Parinaud's conjunctivitis. (Now, in view of what Dr. Lanford has told us that is interesting.) Nevertheless, when Professor Lindner showed this case, I said: "That looks very much like tularemia." He said: "Yes, I called it Parinaud's conjunctivitis, but in America they call it tularemia." This is said to you to establish the identity of the two diseases.

Dr. C. L. Eshleman (New Orleans): This temperature chart is not characteristic of anything. I have seen charts like this in tuberculosis, in typhoid or paratyphoid and in septic conditions. The important thing about this shart is that the patient showed this kind of a temperature curve, but was negative for tuberculosis typhoid and sepsis. This should make ane think of undulant fever.

It has been suggested that when blood is examined for a Widal test, if the Widal is negative it might be well to carry on the agglutination test for *B. miletensis* and *B. abortis*. If this were done probably many more cases of undulant fever would be detected.

Dr. Wirth (closing): I just want to answer the question as to whether or not the disease does occur in parakeets. Available information reports that it does and that at present the disease is quite prevalent in Latin American countries in parakeets as well as parrots.

GROSS AND MICROSCOPIC PATHOLOGY IN CHRONIC MAXILLARY SINUS DISEASE.*

ROBIN HARRIS, M. D.,

JACKSON, MISS.

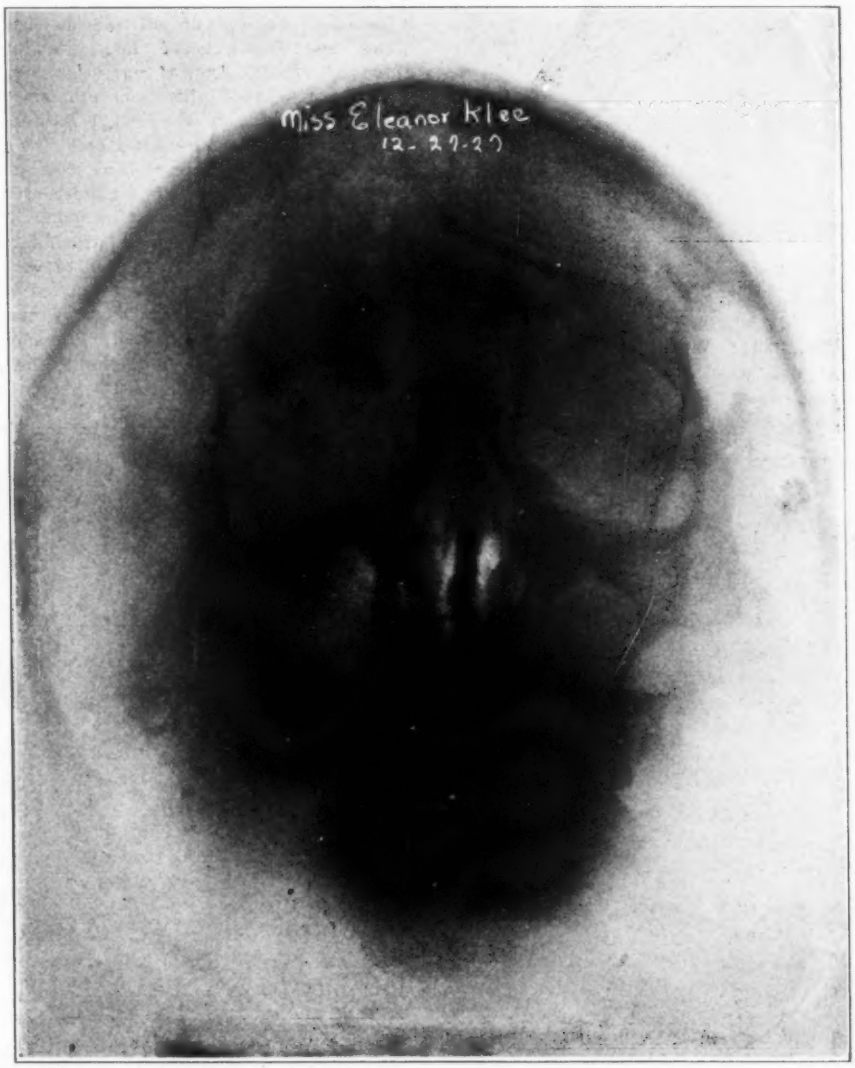
There is room for much work in the relationship of the clinical findings in sinus disease to the type of pathology found under the microscope, and to accomplish this one man must do the work. One man must see the pathology in the nose, interpret the roentgen-ray findings; and the same man must see the gross pathology at operation, must cut the sections and study them under the microscope. So far this has not been done perhaps with the proper vim and vigor. We do know that there is more than one type of sinus disease. Many writers, notably Stuckey, claim that there is a certain relationship between at least certain types of sinus disease and scurvy and that diet will largely correct the trouble. A few microscopic sections secured at operation will now be shown with little effort to connect them up in a practical way with the history and treatment of the patient.

Case No. 2320: J. C. This patient entered the hospital for treatment of intestinal disease. After examination by a proctologist he was sent to me with a notation that there was a "spastic colitis due to some infection above." Skiagram indicated a long standing pan-sinusitis on the right. Radical operation was done on all sinuses on the right: the antrum by the method of Caldwell-Luc; the frontal, ethmoids, and sphenoids by the method of Lynch. The gross findings at operation were: a mucus membrane that was thick and granular with protruberances, the latter apparently of fibrous tissue. The section as described by the pathologist was acutely inflamed mucosa;

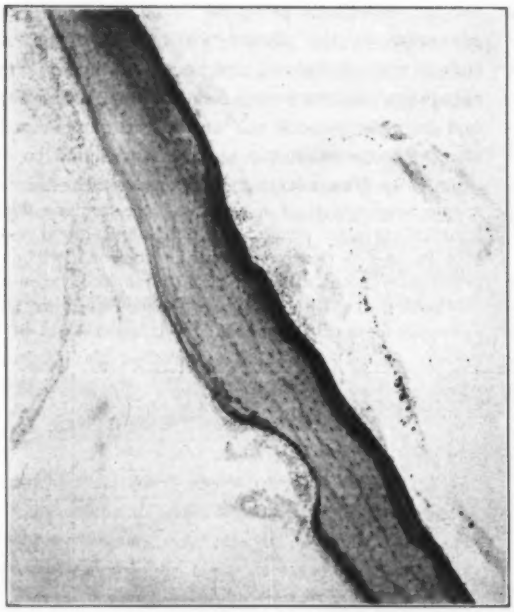
*Read before the Section on Eye, Ear, Nose and Throat at the Sixty-third Annual Session of the Mississippi State Medical Association, Vicksburg, May 14, 1930.

the submucosa was edematous and infiltrated with plasma, lymphoid, and eosinopholic cells. There were dilated capillaries and lymph channels stuffed with polynuclear leucocytes. Many large spheric refractile bodies resembling large yeast-like cells were found among the exudative elements. In passing we might say that all the inflammation in the colon and rectum cleared up immediately after the sinus operations.

Case No. 2321: Miss K. This patient, a young nurse, complained of sore throat for only a few weeks prior to operation. No plausible reason for this complaint could be found until a roentgenogram of the sinuses was made. The first slide is without lipiodol and presents a large polyp apparently on the floor of the antrum. The second is with lipiodol and shows the same condition. At operation the antrum was found to be practically filled with polypoid tissue. The microscopic specimen is of a narrow piece of bone with large Haversian canals and thickened blood vessels in the periosteum. Other sections without bone show many tubular glands, marked vascular thickening, hyaline change of peri-glandular tissue and moderate lymphoid cell infiltration.

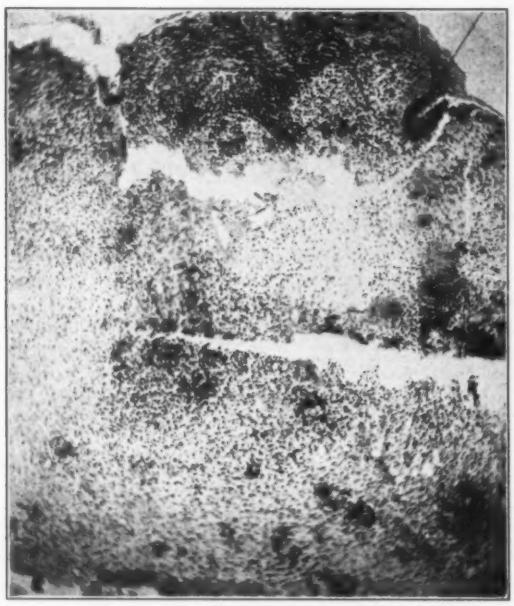


Case 2321



Case 2321—Section shows bone adjacent to chronic inflammation of mucosa. Note the zone of resorption and repair. The dark zone is that of hyperplasia.

Case No. 2351: W. D. K. This patient had headaches and nasal discharge for nine years. Two Lynch operations had been done in the little town of Atlanta down in Georgia four years previously. Roentgen-ray examination showed marked increased density in the right antrum. Unfortunately in this instance the skiagram has been misplaced. At operation the right antrum was filled with a markedly degenerated polypoid membrane. Microscopic section showed sub-acute granulation tissue of the mucosa. The predominating infiltrating cells are of the plasma cell type. In all sections the epithelium shows only in the crypts.



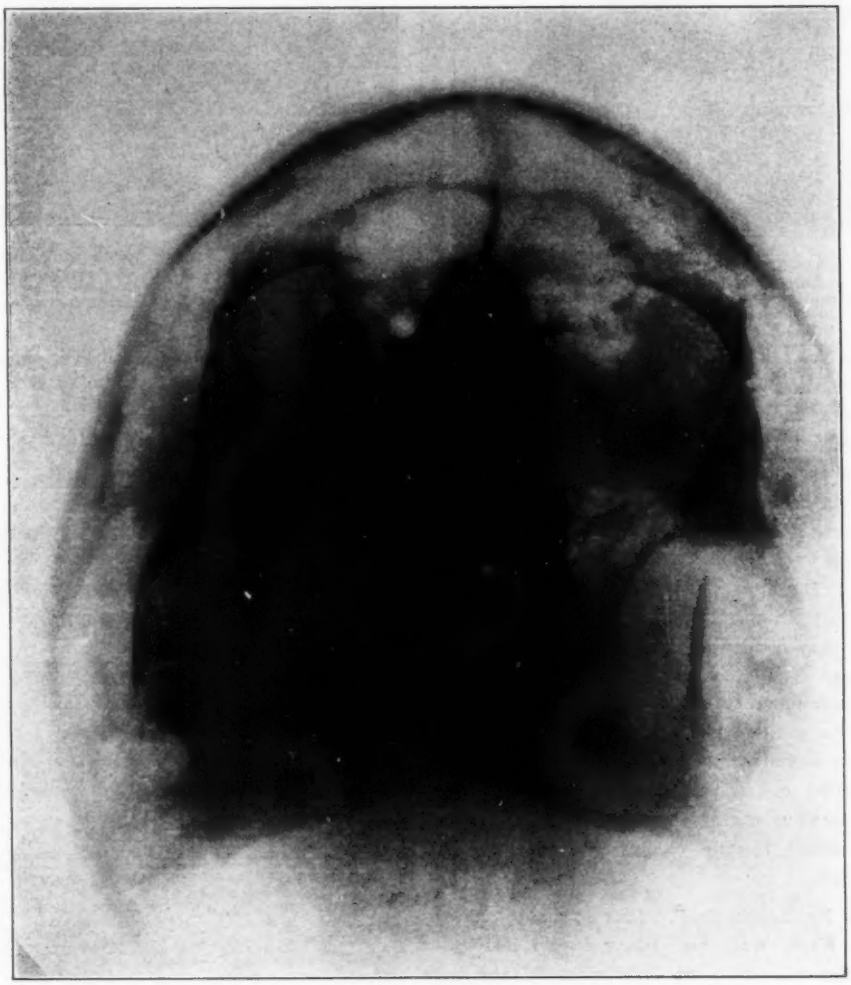
Case 2351—The epithelial lining appears only in the crypts. Elsewhere there is cellular granulation tissue.

Case 2335: Mr. S. This patient was a white man about fifty years of age who complained only of stomach trouble and was referred to me by Dr. H. R. Shands for examination of the sinuses. Roentgen-ray examination showed marked increased density of all sinuses on the left, and less evidence of long standing disease on the right. Radical operation was done on both antra, and intra-nasal ethmoidectomy and sphenoidotomy on the left. Pathology in all cases was much the same, only the left being presented. The antrum was full of pus, the lining membrane perhaps a hundred times thicker than normal and ulcerated in spots. The microscopic section shows many large dilated mucous glands, the one presented is filled with secretion containing exudative elements mixed with double walled yeast-like bodies. There are large mononuclear cells, eosinophils and plasma cells in the infiltrated zone of inflammation. The epithelium in some portions of this section approach meta-

Case 2335—Section shows a large dilated gland in the center filled with secretion and whose walls contain exudative elements mixed with large double walled yeast-like bodies.

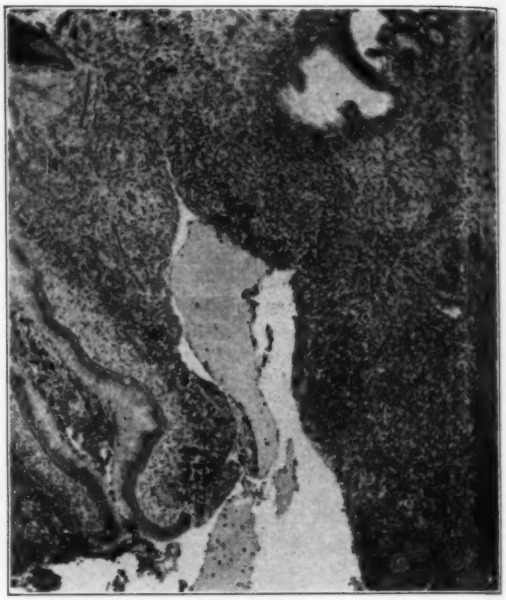
plasia. Recovery was complete and all stomach symptoms have disappeared. The patient now eats the same as any normal human being.

Case No. 2334: Mrs. P. This little woman was weak and nervous, no appetite, had been in bed for four months, unable to perform any work for two years, and had consulted every doctor she had ever heard of. She was referred to me by Dr. H. R. Shands for sinus examination. At examination there was noted some thick, yellow pus in the olefactory fissure on the right side. There was a little edema in this region. The roentgen-ray showed a marked increased density in the right antrum and the right ethmoid. At operation the right antrum was completely filled with thick, yellow pus, and the mucosa was much thickened. The section shown on the slide is through a mucosal crypt. Underlying the mucosa there is a wall of plasma and lymphoid cells infiltrating the submucosa. The mucous glands are atrophic. The complete recovery of the patient was rapid. She gained thirty-five pounds in the first ninety days after her operation.



Case 2334

Case 2334—Section through a mucosal crypt. Underlying the mucosa there is a wall of plasma and lymphoid cells infiltrating the submucosa. In this zone there are atrophic mucous glands. This is chronic inflammation.



Case 2330—Section shows subacute inflammatory and proliferative changes. The lower right hand corner shows periosteal hyperplasia. To the left there are occluded arterioles and venules with concentrated endothelial cells forming pseudo-giant cells.

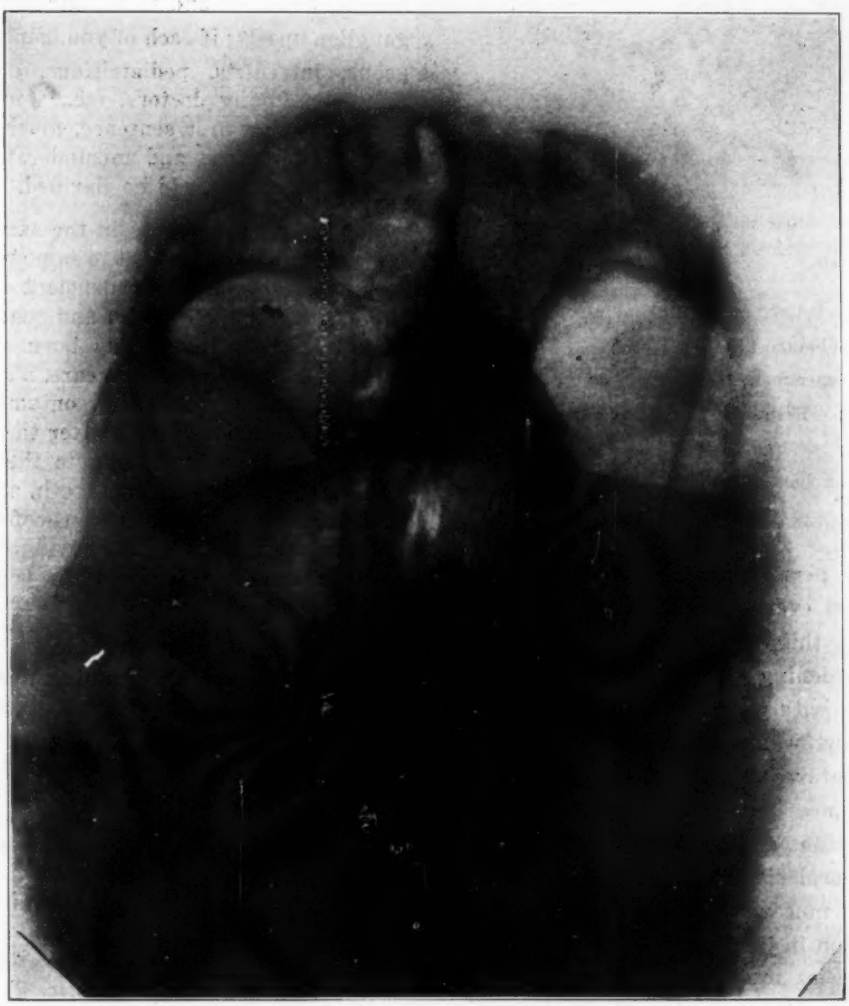
Case No. 2330: B. W. This patient was a veteran of the World War and gave a history of discharge of pus from both sides of the nose ever since 1918. Roentgen-ray of sinuses showed marked increase in density in all sinuses, especially marked in the right antrum. At operation the lining of the right antrum was found to be markedly thickened, some spots thicker than others. The epithelial lining was ragged and the bone very rough throughout the antrum. The antrum was filled with thick, greenish, foul smelling pus. The accompanying section shows subacute inflammatory and proliferative changes. In one corner shows periosteal hyperplasia. There are also occluded blood vessels with concentrated endothelial cells forming psuedo-giant cells. In other sections there is marked bone destruction and marked hyaline changes of the basement membrane.

Case No. 2327: R. T. Like so many veterans of the World War this patient gave a history of discharge of pus from both sides of the nose since 1918. Four years before examination he had to quit his job as court stenographer because of his inability to concentrate. He had what he termed a "nervous breakdown" at that time, and he had been broken down ever since. Roentgen-ray showed marked increased density in all sinuses, not very well brought out in the accompanying lantern slide. However, he had radical

Case 2327—Section shows advanced chronic inflammatory fibrosis around the blood vessels of the submucosa.

operation on all sinuses. The frontal, ethmoids, and sphenoids were done first with very little relief. About a year later both antrums were operated on by the Caldwell-Luc method, followed by relief to such an extent that he went back to his old occupation. Microscopic section of the bone showed many wide marrowed cavities with dilated lymph channels. Periosteum was markedly thickened and fibrosed. Another section showed marked proliferative phases of mucous glands and plasma cell infiltration with great thickening of many veins (more than usual). Submucosa showed dilated mucous glands and fibrosis around the blood vessels.

Case No. 2333: E. S. This patient complained of pain in the left side of her face out of all proportion to clinical findings. The roentgen-ray showed a slight increase in density in all sinuses on the left. Intra-nasal ethmoid and sphenoid operation on the left was done without relief, so the antrum was opened and a complete Caldwell-Luc operation performed. There was some thickening of the muco-periosteum lining and antrum and a specimen was taken from the bone and lining membrane from the anterior wall. This section showed advanced chronic inflammatory changes, marked destruction of bone, fibrous hyperplasia, marked hyaline changes of the base-



Case 2333

Case 2333—Note the marked hyalinization of the basement membrane, atrophy of the mucosa and nerotic debris in the crypts.

ment membrane, and epithelial atrophy with adjacent submucosal hemorrhages. The accompanying specimen does not show a section of the bone. Relief in this case was not all that could be desired, due probably to the large amount of bone pathology.

CONCLUSIONS.

While periosteal thickening was present in almost everyone of the thirty-six specimens in this series, and bone resorption with widening of the Haversian canals together with roughening of the surface of the bony walls were common findings, these features appear to be not as marked as they are in the bone of long standing frontal sinus and ethmoid disease. Goblet-cell hyperplasia, metaplasia, cystic formation of mucous glands, and absence of epithelium in localized areas appear in this small series to be more common than in chronic frontal and ethmoid disease.

SINUS DISEASES IN CHILDREN.*

R. C. LYNCH, M. D.,

NEW ORLEANS.

Five factors stand preeminently to the fore at the present time, in the consideration of sinus disease, and the younger the patient the more important are these factors in determining the best course to pursue, to bring back health and well being.

Deficiencies in diet, allergic states, endocrine unbalance, sinus infection by continuity and contiguity of tissue, including tonsils, adenoids and teeth, sphenopalatine ganglion upsets; if each of you, general surgeons, internists, pediatritians, otolaryngologists, family doctors, etc., would only remember this first sentence, much of our trials, tribulations and misunderstandings of sinus disease would be clarified.

For instance, two rats in the same cage, same environment, subject to same bacterial flora, the one on a diet deficient in vitamine A, has sinus disease, and the control doesn't. A ward of newly born children under observation for two years, all on balanced diets and away from contamination, scattered to various homes after the second year, but followed carefully to the eighth year, not one had a carious tooth, and only one had mastoid, and this because of an over careful guardian who unknowingly skimmed the milk and deprived the youngster of its vitamine A.

Quoted from Dr. L. W. Dean,—a poor little youngster with a running nose, frequent or continuous colds, eating starches and sugar, cross and uncontrolable, blossoms out into the bloom of youth and the glory of adolescence, when vitamine A is added to a balanced diet, provided the pathology of the sinus lining has not become secondarily infected.

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*Read before the Section on Eye, Ear, Nose and Throat, at the Sixty-third Annual Session of the Mississippi State Medical Association, Vicksburg, May 14, 1930.

The same child might be sensitive to cream of wheat, milk, eggs, etc., the same bloom may take place with the removal of the allergic offender, and again provided the sinus lining has not undergone too much change. While I admit we are yet not so strong in our endocrine understanding, the empiric instances in our practice impress the fact that a small amount of thyroid or pituitary or another gland extract plus or minus a little calcium will often cause the weepy running nose with a positive roentgen-ray plate showing sinus thickening into a clear nostril and a clean plate.

Then we all must admit that a sinus can and does become the seat of either a suppurating or a hyperplastic type of infection when none of the previous factors are at work, and in children and infants, especially is this true, Here adenoids and tonsils, either hypertrophic or infected, or both, probably play the etiologic role, and their removal will be followed by the bloom and glory. Later in life, a tooth or teeth may and do cause the same complex.

Our experience coincides with the literature which is full of instances where both pain and reflex phenomena are the result of some upset along the sphenopalatine ganglion pathway. These are many and devious. When they are isolated and either treated or blocked, the bloom and glory spring likewise. In infants and children at least we see fewer of this group than the previous mentioned.

If all our sinus cases could only be classified under any one of these heads alone, what an easy task it would be. Unfortunately most of them are combinations of one, two or all of the headings and the separation of the blame and its proper placement requires both patience and experience. It takes time, patience and understanding as you know to raise children and it takes these and lots more to treat them. I know of no place that is worse for a hobby, than here, be it entirely operative, nutritive or allergic.

I am, however, convinced that when the membrane lining a sinus has undergone hyperplasia or metaplasia or is the seat of a suppuration plus its pathology, that neither allergy alone or diet or endocrine medication will bring back to function this membrane without some additional help from either local medication or surgical interference.

The diagnosis of sinus disease in infants and young children boils itself down to but a few steps and these are of extreme importance. Should one have available the cooperation of an active pediatrician, his advice is indispensable, or to put it the other way, in my own practice most of my cases come with a tentative diagnosis for my confirmation. Deficiencies in diet, allergic states and endocrine unbalance have been looked into before we see the patient and if not, then we have them carefully gone over for this viewpoint before proceeding further.

Our problem is, if the sinus, maxillary, most often, ethmoids next, frontal next and sphenoidal last, is the result of one or all of the three states, can it be eradicated without interference? Patient trial is the only test and it is well worth while. If not brought back to normal, nasal inspection can be done with baby instruments and will show the same phenomenon as we are accustomed to see in the adult.

The otolarygologist is familiar with these changes; to the rest it is useless to consume your time with its detail. Trans-illumination is of no value in infants, and we find its value increases with age probably after the tenth or twelfth year.

Roentgen-ray is a source of great help to us in infants and young children, but the plate must be a good one to be of any value. One essential is quiet, and it is frequently necessary to administer a short anaesthetic for this purpose, usually ethyl chloride, for the period of recovery is sufficiently long to allow the taking of several

positions and this too is necessary, in order to view the sinus in its various dimensions.

If the history, inspection and roentgen-ray give increasing suspicion of sinus involvement, we can and do use a baby Holmes pharyngoscope. This permits a vision and study of the middle meatus, middle turbinate, especially their posterior ends, and the region of the sphenoid and ethmoid, giving in this way additional information as to evidences of inflammation and degeneration of tissue, and permits us to better picture the stage and character of pathological change going on in the sinus cavity. For it is upon this basis that we must plan our medication and base our prognosis as to final recovery and form an estimate of what will be necessary to bring this about.

Puncture of the sinus, instillation of five to ten drops of sterile water and its aspiration, add further evidence to our increasing information and finally one can palpate with probe tip or syringe or other suitable instrument, the walls of the sinus. If all of this concludes the sinus membrane to be thickened, possibly degenerated, and purulent, a large naso-antral opening can be made under the inferior turbinate. I use four instruments for this purpose, a Toby trocar for puncture, a syringe with special cannula for aspiration and cytologic as well as cultural study, a Deans rasp to carry the opening forward to the pyriform process of the superior maxilla, and a small Skillern punch forceps to bite out the posterior portion of the naso-antral wall. This piece of bone with its antral mucosa attacked is removed carefully and provides an excellent undisturbed specimen for microscopic study, providing it gets to the laboratory quickly before drying.

I have resected the middle turbinate and opened the frontal intranasally at two years; I have done the external operation likewise at two years; I have opened a large sphenoid at three years and have done a double radical antrum operation at five years; and I am becoming more convinced that the sinus of a child is no different from that of an adult. Its pathology will be as far advanced as many of the older patients. Likewise a large naso-antral opening, even if it stays open, and the most of them do not for a longer period than six to eight weeks, even if they do stay open, this drainage and ventilation is not sufficient to bring about a clearing up of the pathology and the return of the membrane to its normal physiology. If this does not occur, then as in adult cases, one is forced to remove this degenerated infected pathologic membrane completely, to secure the proper elimination of this area as a focus of infection. This is especially true in those cases with manifest secondary expressions,—in the order of frequency in my experience, kidney, bronchial tree (asthma bronchitis), joints and heart.

One other statement, if a child from whom tonsils and adenoids have been removed, does not bloom forth or has tracheo- bronchial attacks, or repeated ear infections with abscess formation, or has an inexplainable cough, look to the sinuses, yes all of them, but particularly the antra, for the cause. We are finding many more of these cases now since we know the cause.

In the post -operative treatment of the naso-antral opening, we irrigate as we do the adult. I have discontinued rubber, metal or silk tubes, feeling that they not only traumatize an already pathologic membrane, but the nasal vestibule as well, and prolong the convalescence rather than shortens it.

DISCUSSIONS.

Dr. Edley H. Jones (Vicksburg): This excellent paper portrays very clearly the modern trend of thought regarding sinus disease in children. In order to get best results it is imperative that the oto-laryngologist have the thorough cooperation of the pediatrician, or family doctor as the case may be. Few of us are so fortunately located that we have the advantages mentioned by Dr. Lynch, that is, having the case worked out when it is referred to him. Unfortunately we very frequently must needs refer our case back to the family doctor and are not always successful in getting his thorough cooperation.

Thanks to the good work of Dean and Stucky, the matter of correct diet in these cases is being given more and more attention. These children should always be placed on a balanced diet, heavy in milk and containing ample vitamins, mineral salts and cellulose. In this conenction, I would like to condemn the practice of prescribing irradiated ergosterol for this type of patient. This preparation contains only the vitamin D and has no vitamin A content whatever. Nevertheless because it is so convenient to use it is frequently prescribed. The 5-D codliver oil is good, but I personally prefer the plain, standardized codliver oil. Unless green vegetables and fruits, containing cellulose, are included in the diet, the patient will have a tendency to become constipated, which would further complicate the conditon.

In my humble opinion, allergy is as much a specialty as oto-laryngology. There are times when it becomes necessary for the oto-laryngologist to do this type of work as well, but unless it is done by a trained man the results can not be good. Perhaps it is fortunate that the period of life from three to fifteen years is fairly free from allergic conditions. Statistics show that allergic patients frequently show symptoms during the early months of life; these symptoms usually disappear around the third year and do not re-appear until after the patient becomes twelve to fifteen years old. There are, of course, many exceptions to this rule. Allergy may demonstrate itself in various ways. It may appear as a hay-fever, either perennial or seasonal; it may appear as an asthma; or it may demonstrate as an atypical indigestion with urticaria or eczema, etc. Naturally these conditions must be corrected and, as Dr. Lynch states, must be corrected before the sinus membranes become pathologic.

I am sorry Dr. Lynch did not go further into the discussion of endocrine upsets. This is a subject about which I know practicallly nothing and I have been unable to find anything definite in the literature. I will be most happy to learn more, and would appreciate his stating what type of cases he uses thyroid and pituitary extracts in, even though he uses empirically.

The spheno-palatine ganglion conditions which he mentioned are quite interesting. It is my impression that at least two-thirds of the headaches due to sinus trouble can trace a connection with this ganglion. It is also my impression there must be some definite pathology to cause a spheno-palatine ganglion neuralgia and the symptoms occurring with that syndrome. I believe that we should trace the origin of the trouble, though it be a bad tooth, a sinus infection, etc., and relieve the patient, rather than to block the ganglion. After every diseased condition that can be found has been eliminated and these symptoms persist, it is logical to proceed with blocking in order to relieve the patient. I have personally never seen a case of spheno-palatine ganglion neuralgia in a child that did not clear up when the causative factors were removed. I might mention that I have found several cases in children where the trouble was due to some trouble with the teeth.

As Dr. Lynch has stated, roentgen-ray is of much more value than transillumination, but I find many cases with positive clinical findings that show no pathology by roentgen-ray. Those cases which do not clear up under treatment should, as he stated have a basal antrum opening made. I have never seen any patient suffer any harmful consequences from the simple opening of an antrum and have seen a great many vastly improved. If there is a larger patulous normal opening this procedure will not be necessary. I have been fortunate in never seeing any child that demanded radical surgery with any of the sinuses with the exception of the antrum. I have seen two patients in which a radical antrum operation was indicated.

I also wish to stress his statement that no place is more dangerous for the riding of a hobby than in the diagnosis and treatment of sinusitis in children. Each case must be studied individually for no rules can be laid down for all such conditions.

Dr. Robin Harris (Jackson): I would like to show a few lantern slides and that is about all. Every man who treats children sees sinus disease. He sees sinus disease whether he recognizes it or not. It has only been a few years since the eye, ear, nose and throat man recognized sinus disease in infants and young children. Perhaps one of the first papers read on that subject was in 1918 and it was taken with a grain of salt by most eye, ear, nose and throat men at that time. Now all pediatrists at this time are recognizing sinus disease in children and the most of them in infants. Most sinus disease in infants gets well with a little local treatment and proper diet. I want to show a few slides of a few older children in which they have not had the proper treatment and will eventually go on to be compelled to have radical surgery, and these children all—probably all—could have been cured if proper diet and proper treatment had been administered at the earliest age.

Here followed the slides.

Dr. E. F. Howard Vicksburg): I was delighted with what Dr. Lynch had to say about the introduction of tubes. Like a good many of us who did not know in the beginning, I tried some and I think I nearly always did more harm than good, for the use of the tube seemed to cause more irritation than was produced by the sinusitis. I have generally found in the comparatively few cases I have had to handle, that a good opening, as the doctor

said, which will close in six or eight weeks, will have sufficient ventilation and drainage, and if the case doesn't get well under that treatment, it means that I have undervalued the severity of the condition and that he should have had something more radical done in the beginning. That is very often the case.

Dr. Ralph Bowen (Memphis): Dr. Lynch's paper has splendidly emphasized the etiology in sinus disease in children, and it is with reference to this phase I would like to discuss a few points regarding allergy and diet.

First, allergy as an etiological factor cannot be denied but the approach to rule in or out various factors has failed in many instances because the attending physician who may own a $50.00 or $100.00 set of antigens embarks on a problem which should be limited to an allergist exclusively. For work done in this way is not only a waste of time in many instances, but can also put allergy in disrepute. I can best demonstrate this by a case reviewed a few days ago in which many tests were done on a hay fever patient. I am sure the average attending phyisician would have given up after applying as many products as the allergist did in her case, but he continued his investigation and found flaxseed to be the principal factor. Its removal from the patient's environment was beneficial since it was an ingredient used in hair dressing.

Second, as was mentioned by Dr. Lynch, diet can be very effective in preventing sinus infection—particularly one rich in vitamines. As we all know, cod liver oil is one of our greatest adjuncts in this respect, but unfortunately during this great era for substitutes" our medical journals and druggists are conveying the impression that viosterol preparations can be used instead of cod liver oil, and in so doing they are depriving our children of vitamin "A" which in infection is more important than the "D" factor. So as physicians I think it is our duty to insist that cod liver oil be continued either alone or plus viosterol.

There are many sinus problems in children which at time of recognition need surgical interference, but I think by better cooperation of the pediatrician and tolo-laryngologists fewer radical procedures will be needed in the future.

Dr. R. C. Lynch (New Orleans), closing: I want to stress the point particularly that in young children and in infants our problems in this instance are very closely associated with our knowledge of general medicine and that in order to be good otolaryngologists we are going to have to be good internists, and I am finding more and more cases where outlying situations, food upsets, etc., are extremely important in laying the foundation for a permanent cure of a sinus case. I have always fought justly and truthfully the idea that once a sinus always a sinus. My reaction to that is that the reason for always a sinus is not the sinus' fault, it is not the individual's fault, but it is the Doctor's fault and you have a fundamental reason. There is no reason, in my estimation, why a sinus, no matter how or what the conditions are, should not be made well again. It can be made well again if you will go far enough, so that the first paragraph in the paper was written with that general idea in view.

Secondly, it is coming more and more to my mind all the time that a naso-antral opening is not the last word in the care of this sinus. Many men stop here and thus the reputation—once a sinus, always a sinus. That is wrong. We know it is wrong for adults, we recognize it, but it is just as wrong for children, in my estimation, and the age of the child makes no difference—I mean bears no particular relation to it, provided the outlying factors are thoroughly and conscientiously and rightfully weeded out—that is food upsets, etc., so the fact which Dr. Howard brought out, and which is probably the experience of all of us, that after a nasal opening or whatever you have a tendency for in that direction, and we won't discuss that, but the mere presence of the polypus popping out is an evidence that that membrane is still kicking up a reaction to some irritation on the inside, and that that irritation is the fundamental source of the inflection, and that the pathology is still going on and will still go on unless you remove that source of infection.

I will say one more word—I would suggest to you that you do not consider your children, your infants and children well, unless you have had a follow-up by roentgengrams. We often find this situation: You make a large nasal opening and the nose gets dry and the symptoms disappear, and you take another roentgengram and you are surprised, —this antrum is still thick, and you take another roentgengram and this antrum is still thick and you put in a little instrument in children and measure the thickness of this tissue and we find there is still thickness. Now, I don't think all this thickness is scar tissue. You know Kirstner brought out a very interesting point in the study of the antrum membrane, and that is after you take the membrane, from an infected antrum and grind it up and macerate it with salt solution, and culture that membrane, in about 80 per cent of the cases you will find a streptcoccus coming from that tissue. They are not on the surface but they are deep in the tissues, and how often have you opened up the antrum and found the pus in the mucous membrane of the antrum was under the surface and you could not wash it out, and which did not give any increase in the cells, and, therefore, you are going right over the reasons for the

antrum acting as a focus for infection, so that the questions that come up in the study of sinus disease in infants and children, to my mind, are no different what ever from the study of the same disease in the adult, and that the basis for your conduct in relation to the case depends upon the pathological changes in that antrum, and if you will look at the antrum from a pathological standpoint, rather than from a symptomatic standpoint, I think you will come nearer to bringing the cases to recovery.

TONSILLECTOMY HEMORRHAGES.*

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Recently a more than ordinarily intelligent nurse, who has had considerable surgical experience, put this question to me:

"We see so many tonsillectomy cases that are 'bleeders' and we never hear anything about 'bleeders' except in connection with tonsillectomies; is tonsillitis the cause of hemophilia?"

This question suggested my subject.

* * * * *

Hemorrhage is, of course, the *bete noir* of all who do tonsillectomies. We are working in a vascular area and very generally in the presence of some degree of inflammation. It is not at all surprising that some blood is lost.

But the most noteworthy feature of a tonsillectomy hemorrhage is the promptness with which the operator reaches for his alibi the minute the patient begins to bleed unduly, and the alibi is always the same, hemophilia. Of course he doesn't come right out and say "hemophiliac" unless the hemorrhage is extremely severe, because that is what the Scotch call a "by-ordinar" word and is saved for special occasions, but he is thinking in terms of hemophilia as is evident from such expressions as: "He's losing a lot of blood," "He bleeds very freely" or—when the suction apparatus fails to keep the field clear—"He must be a bleeder."

Lest we use our alibi so often that we come to believe it ourselves, why not abandon it for good and admit that the general run of hemorrhages are due to the operation? Exceptions are comparatively rare.

There are two mistakes, frequently made, that may cause hemorrhage: we fail to get all the tonsil and we cut too deep and wound the underlying muscle[2]. By far the general run of hemorrhages is due to one or the other of these mistakes and considering the number of incomplete tonsillectomies that are done, the only wonder is that there are not more hemorrhages.

The exceptions are few. Large, aberrant vessels; atheroma and high blood pressure; recent acute inflammation; hemophilia; these constitute our best alibis.

A very slight study of the general question of bleeding and of the anatomy of the tonsil will point the way in our consideration of the usual causes.

Nature provides three means for hemostasis: the coagulability of the blood, the contractility of the vessel walls and the contractility of the tissues surrounding the vessel.

The tonsil is composed of ordinary lymphoid tissue, with some connective tissue fibres arranged in trabeculae that extend from base to surface. The vessels lie along these trabeculae[(2)].

When we do an incomplete tonsillectomy, leave a piece of tonsil behind, the cut end of the vessel lies in non-contractile tissue and its mouth is held open by its attachment to the trabecula. Practically our sole reliance is in the clotting. Bleeding may occur at once, and if checked by pressure only, may recur in two or three hours if the clot becomes dislodged[(2)]. We have all seen such cases.

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Or if we have gone too deep and wounded the underlying muscle, we have damaged the tissue surrounding the vessel, thereby inhibiting its contractility, and we may have approached so close to the main vessel that the cut end is little more than a hole in its wall. These cases frequently bleed furiously and generally require some ligating[2].

The answer, then, is that to avoid hemorrhage we must do our cutting in the layer of loose areolar tissue, between the tonsil capsule and the sheath of the underlying muscle. I frequently fail to do so.

Carmack of Indianapolis has recently made a study of anomalous large vessels that is well worth reading. Apparently they are more frequent than is generally supposed. Incidentally he mentions five deaths, from this cause, that occurred in Indiana during a period of two years—none having been reported[3].

Dilated blood vessels form part of the general picture produced by an inflammatory process, hence if necessity compels us to operate in the presence of inflammation, careful preparation is in order. A good deal has been said of late years about tonsillectomy for the relief of peritonsillar abscesses. If any of you can convince me that this is good surgery, I will be glad to refer my abscess cases to you.

Patients with high blood pressure and atheromatous vessels frequently need, and must have, tonsillectomy. There is no need to discuss this question before such a body as this.

And now we come to our dear, old friend and faithful alibi, the hemophiliac. In all honesty, how many of you ever met him, I mean apart from his tonsillectomy. I make the definite request that every man in the room who has seen one will join in the discussion to the extent of saying so. Understand, I don't deny his existence, but I contend it is extremely significant that he is very often present at tonsillectomy and practically never seen anywhere else. You might call him a tonsillar phenomenon. How so many boys can go through life skinning their elbows and knees, cutting themselves with their pocket-knives, indulging in those frequent joyful interludes with their playmates that are provocative of traumatic epistaxis, and never even suspect that they are hemophiliacs until somebody takes out their tonsils, this is beyond me. And I have even heard girls, who bled at tonsillectomy, called "bleeders."

The real bleeder diagnosis is summed up in:

"1. Definite heredity, through unaffected females (law of Nasse).

"2. Prolonged bleeding time.

"3. Coagulability markedly diminished.

"4. Normal blood picture except leukopenia, if anything. Blood platelets not diminished, as some have reported.

"5. Origin in early youth."[4]

Remember, too, that the bleeding of hemophilia is a steady oozing, not a profuse, rapid bleeding as from a cut vessel. And that a hemophiliac will demonstrate his ability to bleed on any and all occasions, it's not a case of here today and gone tomorrow, and from a lesion in any locality—he isn't a hemophiliac in his tonsils and normal in his toes.

Secondary hemorrhage, true secondary hemorrhage, occurring usually from the fifth to the tenth day, is, of course, due to infection. You will find an excellent explanation of this by Dr. Lynch quoted by Comer in the Annals of Otology, Rhinology and Laryngology for last June.

"Those hemorrhages occurring from the seventh to the tenth day are due to one of two things: First, a tonsil stump or remnant, is essentially of poor resistance and infection is the rule. This infection travels down through the tonsil tissue to its capsule and there ulcerates through the base, leaving the mouth of the vessel

wide open. Second, if the dissection is such as to extend down into the muscle tissue, and infection occurs in this area, the resulting sloughs produced by the infection will weaken the walls of the veins, and since they are, in this location, near the trunks of the main vessel, hemorrhage results."(2)

You will note the inference that if the operation is properly performed there will be no secondary hemorrhage.

I have seen seven such cases, six of which occurred in my own practice. Two bled profusely, two slowly, but steadily, in three the bleeding was immaterial and stopped of itself before anything could be done for it. One of the severe hemorrhages and one of the slow and steady variety yielded completely to a few minutes pressure. The others, one severe and one that bled slowly and steadily, were given an anesthetic and search made for the bleeding point. In neither case could it be found, the hemorrhage having stopped completely.

I have puzzled over these two cases considerably, especially in the case that bled profusely. It seemed so futile to put a patient who was bleeding rather badly, and had been for some two or three hours, on the table, subject her to an anesthetic, clean the blood out of her mouth and send her to bed without having done anything to stop further bleeding. But the fossae were entirely dry and remained so. Either she had bled her limit, which certainly wasn't the case with the other patient, or the relaxation due to the anesthetic stopped the hemorrhage.

My own experience with secondary hemorrhage is so small as to be of no value, but I must remind you that it is sometimes fatal.(1)

In preparing your patient for operation, permit me to suggest that you do not ignore the coagulation time. I am quite well aware that this precaution is more honored by neglect than observance, and that nowadays much more attention is paid to bleeding time. There are too many possibilities of variation, not to say error, in the estimation of bleeding time. Here are three reports, same technician, same tecnic, made a few hours apart on a prospective tonsillectomy case, a five-year-old girl, who was being prepared for operation by her family physician:

1. Coag. time—7¾ min. Bleed. time 1½ min. 3 cc. hemostatic serum.

2. Coag. time—6 min. Bleed. time 2 min. 3 cc. hemostatic serum.

3. Coag. time—5 min. Bleed. time ½ min.

I have seen a number that are quite similar.

If you will follow your reports with a little care you will find that those on bleeding time are worth the paper they are written on, just about.

But a knowledge of the coagulation time is frequently of real value, and the need for it may appear in the most unexpected places. I take it consistently, and since I have adopted the routine of giving a preoperative coagulant to patients with slow coagulation time, I have had far less annoyance. This, of course, only guards against simple oozing. When there is real hemorrhage, clotting alone should not be relied on—the only hemostatic worth considering is a ligature. But certainly blood coagulation aids hemostasis and personally I want all the "breaks," if there are any, to be in my favor, for I can not rid myself of the idea that the hemorrhage is due to the operation.

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DISCUSSIONS.

Dr. H. L. Arnold (Meridian) Dr. Howard has brought out the particular point that hemorrhage is due to the operation, but with a cut tissue we expect hemorrhage. There would be something

abnormal about tissue if it did not have some amount of bleeding, but if we do undue trauma or cut outside of the capsule, I do not think there is any doubt but we are apt to have more bleeding than when we do stick to the capsule of the tonsil. In this day when so many are doing tonsillectomies, most every one, whether they have had much training in tonsil work or not, we see so many throats with scar tissue, and we find a great many of them with remnants of tonsils.

Dr. Dick of Chicago examined a series of cases that had been operated on and found about 75 per cent with remnants of tonsils. Yet we often find that when we take out a tonsil, a whole tonsil and nothing but a tonsil, we will have bleeding, coagulation time to the contrary, and those are the cases that we don't enjoy. There are three types of tonsillar hemorrhage. We have the immediate hemorrhage, the reactionary hemorrhage, and the secondary hemorrhage. In the immediate hemorrhage, if it is not controlled by pressure with a sponge in a few minutes, I think it is always a good idea to put a ligature on the bleeding point, if it is in the upper part of the tonsil, with the ligature placed above, and if in the lower part, with the ligature below.

In the reactionary hemorrhage, the hemorrhage comes on a few hours after the operation and is due to the relaxation of the patient under general anesthesia, and I think is particularly apt to occur after the use of a local anesthetic where too much adrenalin has been used, because if we use an excessive amount, you have a relaxation of your vessels after the primary effect passes off. For that reason I make it a practice to use only a one to sixty thousand solution of adrenalin in the local work. Of course with this you get a little more bleeding at the time of the operation, but if there is going to be bleeding, I would prefer to have it at that time than later on.

Secondary hemorrhage comes several days later, from five to ten, and is due to sloughing of the tissue. This is best prevented, I think, by preoperative attention to oral sepsis and by having the patient in the best possible physical condition, by doing as little trauma as possible during the operation, and by the proper post-operative care.

Now, as to coagulation time, I think it is always a good idea to take that, yet it is by no means a sure guide as to the amount of hemorrhage you will have at the time of operation.

In the use of the serums I have not had very much experience because I very seldom have found it necessary to use them, but what few times I have used it I have used the Coagulin Ciba. I do not know whether it is any better than the others or not, but in the few cases I have used it I have had very good results.

Dr. Geo. E. Adkins (Jackson) As long as I raised this young man and did his tonsillectomy, I feel privileged to discuss this paper. We have all had more or less experience with these cases. I hope mine will be less in the future than it has been in the past, but I want to agree with Dr. Howard on the hemophilia proposition. I have never seen one. I don't think I have been guilty of taking shelter wholly under that alibi, however, I am guilty of saying "there is a marked tendency towards bleeding." Have to get out of it some way. Then again, I notice that our female cases are just as bad about bleeding as the males. Hemophilia you know is transmitted by the female but it is manifested by the male.

I have not been very diligent about taking the coagulation test. I think it is a good thing as long as the laity seems to expect it, and if anything does happen, it is a very good thing to have in your record. Nevertheless, I don't think it helps you much in your tonsillectomy.

As to operating on a tonsil that is inflamed, I don't do it. I would not disregard my local field infection that much but it doesn't make your tonsil bleed any worse but less, owing to the increase in the fibrinous contents of the blood in acute inflammations. I would not any more, but on two occasions I have done a tonsillectomy under such circumstances. I might not get by any more and there is apt to be a second tonsillectomy. You have to go back to get part of the tonsils later and somebody else usually does the going back.

High blood pressure I find is no contra-indication because people with high blood pressure have a rapid coagulation time. They will not overbleed. It is the changes in the arteries and not the high blood pressure that makes them bleed.

I do not take much stock in the so-called oozing. I think blood oozing from a tonsil fossa is from a vessel somewhere. I have said before this association that I never used to tie a vessel. That is all different now. I never think of operating any more without tying every one I can find, even if I can stop it with a sponge, I do not want to so completely that I can not find the vessel and ligate it, and the more ligation I do at operation the less I do the following night.

The post-operative hemorrhages are undoubtedly due to infection of the throat followed by the sloughing of the tissues. These cases that I can begin along about the third or fourth day and touch them over with a little tincture of benzoin, if I can keep them free of Vincent's infection,

etc., they will not have a secondary bleeding. It has gotten so common for me to find Vincent's that as soon as I find a secondary bleeder I look for Vincent's, which I should have done before.

Dr. Virgil Payne (Memphis) This paper of Doctor Howard's on post operative hemorrhage has been very interesting to me because being a Junior in our Clinic, I have had to look after quite a few of them, and as they usually occur between midnight and daylight, they cause quite a loss of sleep.

I read an article in 1928 by Dr. A. Lowndes Yates in the English Journal of Larynology and Otology in which he brought out that when the coagulation and bleeding time were prolonged usually the urine was strongly acid. The surmise being that when acid products are elaborated which have a greater affinity for calcium they combine with the calcium of the blood which is no longer all available for activating fibrin ferment. In those cases where the clotting time persistently remains prolonged after the administration of calcium, if you will first alkalinize your patient then give cilcium, the clotting time will return to normal.

What I mean by post operative hemorrhage is about the fourth or fifth day when you get a general oozing and any instrumentation causes sloughing and more oozing—these are the cases that are strongly acid, and as soon as you render the urine alkaline the bleeding will cease. I have also seen this in epistaxis. The electric cautery is applied to the bleeding area, but when the crust comes away the bleeding starts again, this is the case if you will keep alkalinized no further bleeding will occur.

I have seen several such children in the past year. I remember a case I did, a simple submucous on. The day after operation, I removed the packing, but there was profuse bleeding along the entire incision so the nose was re-packed, and the following day the same thing occurred when the packing was removed. The urine was strongly acid so she was given two drams of sodium bicarbonate every three hours, and the next day the packing was again removed with no bleeding at all. Secondary infection also causes post operative hemorrhage but nearly every case is infected to a certain extent, so to this end we are very careful in requesting our patients to come in daily, when we irrigate their fossae with a warm antiseptic solution followed by a powdered spray of orthoform and acri-violet.

I have not seen much in the literature about alkalinity in relation to liability of post operative bleeding, but it has certainly proven useful to us in the past two years, and I think if you will check your cases that have a general oozing from the fossae you will find the urine highly acid, and the administration of an alkali will check it.

Dr. L. S. Gaudet (Natchez) The reason I got up is because Dr. Howard specially requested if any one had had a case of hemophilia that he would like to know about it. I had one, but the patient did not die, she lived, but she came very near dying.

About five years ago I had a little girl about six years old that was referred to me by her family physician with the report that she was in good shape and prepared for tonsillectomy. I did my usual examination and so on, but we failed to get the coagulation time, and we did a tonsillectomy on this little child, and we did it cleanly, because it was not a difficult case. About four hours after the operation the child began to ooze from both fossae and she oozed and oozed and oozed. We tried everything imaginable. We used packs and the bleeding continued underneath the packs. We took them out and put them back, and when the child was about exhausted she stopped bleeding. This case taught me a lesson, a very serious lesson. Since then we check up on our coagulation time. The coagulation time of that child when we did take it afterwards was 18 minutes. Looking back into the family history we came to find out that the mother was a hemophiliac. She had been operated on and had a great deal of difficulty, and with the same trouble. How we overlooked that I don't know, but we did, so that is one case for you, Dr. Howard, that I know of.

Another thing, as far as I am concerned, I do not have any particular fear of tonsillar hemorrhages. I do not know whether we do our tonsil operations any better or any worse than anybody else, but with coagulation time checked, proper preparation, giving calcium and so on, we seldom have any trouble with hemorrhages. Of course, occasionally one might creep up, but it is a very unusual thing for me to have to get up at night for any hemorrhages. I am trying to bring out the fact that if we prepare our patients ahead of time, we will have very little trouble. Most of my work is by reference by the family physician, about 90 per cent, and these men usually send me the case with the patient having been gone over. Then we take the coagulation time and if it is over 6 minutes we usually do not operate, but we calcify our patients if we might call it so. I believe as times goes on most of the oto-laryngologists will fear hemorrhage less and less. I do not think it is such a bug-bear as Dr. Howard seems to think. Of course, we do not agree on many things.

In so far as controlling hemorrhages, I have had the great good fortune, and I want to say it in the gentleman's presence, because he is here

today, of being instructed under our good friend, Dr. Lynch, who is famous over this country for the thoroughness with which he does his work. When I was an interne at the Eye, Ear & Throat Hospital, he always endeavored to instill into us the fact that we must do things properly. Of course, as young fellows, we didn't do things as we ought to, and he jumped on us pretty heavily, and I want to thank him for it today. I believe in all of our work, if we will take time and do it thoroughly we will have a good deal less trouble in our post-operative work. I thank you.

Dr. R. C. Lynch (New Orleans) I am very glad to be here and certainly appreciate the courtesy extended to me in having me come to this meeting, and also to take part in this discussion.

My first idea or reaction to the paper is that it covers the field thoroughly, and to bring out and discuss points so far that have not been discussed so much, is that first of all true hemophilia I think, is exceedingly rare in our experience. Secondly, when we find a true hemophiliac I think it would be a good deal better policy for us, and for the welfare of the patient probably, if we did not operate at all. As to the instance cited by Dr. Gaudet my first reaction was that this patient was not a true hemophiliac, because if the patient were a hemophiliac the mother had no right to be alive. My position is that if the child was born from the mother, that she would have died during childbirth, and, therefore, the chances are that the child would not be alive. I think hemophilia divides itself into classes and the hemophilia cases which are of an infective nature are not true hemophilia cases. These patients will invariably have a reasonably low clotting time, probably half a reasonably low bleeding time, and a fairly high blood platelet count; if that combination is present, a reasonably low bleeding time, a reasonably low clotting time and a high count, then I think one can safely proceed without the fear that one is going to have bleeding which is practicably impossible to stop. The usual true hemophiliac does not live to be more than 10 or 20 years old, because most of the time by the period of dental eruption, the casting off of the first teeth, they usually have some reason to bleed from that area if they have not had some reason before that, and go on so many times to a fatal termination, so that the hemophilia cases are extremely rare and the hemophiliac should not be operated on unless the condition of the patient has been trained up to the point where an operation seems reasonably sure.

Secondly that there are groups or types of cases wherein an operation can be done with safety by training the patient up to the point of operative procedure. The probabilities are that the blood clotting time, and the bleeding time, and the blood count can be controlled. If the first two can be reduced and the second elevated to the point where it is safe to operate, and this preparation will continue sufficiently long to allow healing to take place, and then probably revert back to the original state, that is what I mean by training up for operation. Tonsils which are the source of repeated inflammatory reactions certainly manifest excessive bleeding by an enlargement of the blood vessels, therefore, the case that has a history of long, protracted or repeated attacks of tonsillitis can be expected to have blood vessels whose walls are very much more fibrous and less contractile and bleed more profusely. The bleeding at the time of operation does not indicate that the patient is a hemophiliac, but it indicates that the vessel does not contract as well, and of course, the technic of the operation and damage done to surrounding tissues increases this quantity of blood that is lost at the time of operation.

Following the operation primary hemorrhage, in my estimation, is an evidence of bad technic at the time of operation, that is the patient leaves the table and bleeds by the time it gets down to the room. It is just an evidence that care has not been taken in stopping the bleeding point. The bleeding that comes on in from five to ten days is always, in my estimation, an infective process of one type or other; sometimes it is Vincent's, sometimes pneumococcus and sometimes streptococcus. Probably the tissues which lie close to the tonsil are in a stage of low resistance and, therefore, slough easily, and with the sloughing the veins which were not opened at the time of operation, or which were closed by suture will slough off beyond the line of suture and bleed from that cause, a situation which you will have no way of telling before operation, and a situation which has to be controlled when it occurs.

In attempting to evaluate the usefulness of diathermic coagulation in the removal of tonsils of older people, or in cases where they thought that the usual surgical procedure was not in order, my experience has been that it is impossible in my hands to completely remove all of the tonsil by this means, and consequently that bleeding is likely to be more profuse because of the sloughing scar which results. I say this because it has

been called to my attention many times that the man who sold these instruments for coagulation has quoted me as saying I used the instrument for tonsil removal, because my experience is that I do not remove all the tonsil and consequently the bleeding is more pronounced at the period of time when surgical cases would have been practically well. I do not recommend coagulation.

In the control of bleeding at the time of operation, I have fought for the ligature and fight against pressure. I think we might digress just a tiny bit from the subject of the paper because of the relation to the formation of pulmonary abscesses. I believe the greatest number of pulmonary abscesses which occur after tonsillectomy are of the infarct type. If one traumatizes the intima of veins he lays the foundation for a clot in that vein; if the vein is clotted by the pressure of a sponge for the control of hemorrhage and that vein is not definitely blocked off by a ligature, then expectoration, coughing, movement of the throat, any process which produces a deep inspiration is likely to dislodge the clot from this vein and it finds its way into the lung, and if it happens to block a very small vessel the temperature rises, but it is soon absorbed; but if a larger vessel is blocked more tissue is upset and we are likely to have an abscess from that source. In the present time with the care we all use in keeping the mouth dry, I think the number of secondary pulmonary abscesses from tonsil operations which are due to inhalation of foreign material into the trachea are rare, but I think cases of infarct are frequent, and the general surgeon has just as many of them from gall bladder and appendices as we do from tonsils. So that the method of controlling bleeding, in my mind, is an extremely essential part of the technique of the operation, and that is that each vessel should be ligated by a small piece of catgut around the vessel, for two reasons: first, to stop the blood which is essential for the life and welfare of the patient after operation, and second, to prevent the possibility of secondary pulmonary abscess.

Dr. Gray (Clarksdale): I am not a throat man, just a superfine family physician. I do not do any throat work at all. I just got up to help my friend Howard out. In a rather extensive practice of 40 years, I have seen two true hemophilacs, both males. One a young man now, I think about 28 years of age, has been transfused 12 or 15 times. He is still alive, and doing very nicely indeed. The other was a little boy about a year old, a handsome little fellow that I looked after through one attack. He died about six months or a year afterward from hemorrhage. These are the only two that I have ever seen in my forty years of practice.

I heard the gentlemen speak of administering calcium in these cases of slow coagulation time, and I have had to prepare a good many patients for operation, and I have never found calcium to be of the slightest value in reducing the incidence of hemorrhage unless a parathyroid extract was given coincident. There is no use in giving calcium unless you have some means of fixing it in the blood, and unless you give parathyroid extract at the some time, it is a very long time before you get any increase in the coagulation time.

Dr. E. F. Howard (closing): I was very glad to hear from Dr. Gray, because Dr. Lynch killed Dr. Gaudet's case, as I expected he would. I have been hunting for a hemophiliac and haven't been able to find one. I want to tell you about the greatest disappointment I ever had in my life. It was in regard to a case that was referred to me for tonsillectomy by a general practitioner, and I just want to say right now that he was the wisest doctor I have ever met, and the keenest dignostician—Dr. J. N. Hall of Denver. The man had an endocarditis and it was progressing. Hall was hunting for the focus and said he believed it was in the tonsil, and certainly if it wasn't found the man was going to die. The man said he would have had his tonsils out seven times before, but every time he gave his history to a doctor, the doctor immediately shoved him off. I forget what the coagulation time and the bleeding time were, but they were way up, and the best we could do we could not get them down, and when we operated on him, I think he lost maybe four drams of blood, certainly not more, at the operation, and never bled a drop afterwards. Everybody around the hospital was wondering what was going to happen, but the man said he was willing to take the risk. I didn't exactly want to take his tonsils out, but I had to do it. I am thankful to Dr. Gray, and I am glad to see one man who has seen a hemophiliac. Next time you get one, doctor, let me know and I will come up.

SURGICAL DISEASES OF THE SPLEEN.*

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This subject has not been presented before this body for a number of years. Those of us who live away from large medical centers and medical schools, have small chance to report creditable experimental work, so our papers must necessarily be based on clinical experiences if they are to be at all original and, therefore, worthy of consideration by such a section as this.

Five cases will be briefly outlined which will illustrate five distinct types of surgical diseases of the spleen in which splenectomy is absolutely indicated.

Surgical intervention short of splenectomy is hardly indicated in diseases of the spleen, due to the fact that perfectly good health is entirely compatible with the absence of the spleen from the body, and it is generally safer to remove the spleen than to attempt any surgical repair of this organ. In a very rare localized abscess of the spleen drainage may be safely performed. Practically all other surgical conditions are best treated by ablation.

Of course a full discussion of surgical splenic diseases could not be attempted in fifteen minutes, so only those diseases with illustrative clinical cases will be discussed.

CASE REPORTS.

Haemolytic icterus; case report. Mrs. F. P. S. referred by Dr. Allred of Crystal Springs, May 1921. She was a married lady, 36 years of age, who gave a history of having been jaundiced all her life, and of having a tumor in her upper left abdomen. Her general health was fairly good, notwithstanding at least 34 years of jaundice. Her mother told her that the jaundice had been present since she was two years of age; at times it would become more intense than at others, but was always quite noticeably present. She had none of the usual symptoms; such as itching, hemorrhage or bradycardia which we expect in long continued obstructive jaundice. The stools were of normal color and the urine not particularly bile stained. There was a moderate secondary anemia present. The spleen was greatly enlarged, extending two inches below the umbilicus. This clinical picture would compel the making of a diagnosis of haemolytic icterus to any physician at all conversant with this condition.

A splenectomy was done and in a few days the jaundice began to clear and by the time she left the hospital thirteen days later, all evidence of jaundice had disappeared and has not returned. The patient is now living in Jackson in good health.

The cause of haemolytic icterus is not known. It is known that the enlarged spleen is an active agent in the abnormal destruction of red cells. In this disease the red cells themselves are more fragile than normal; as shown by the fragility test with hypotonic salt solution. The jaundice is due to the abnormal liberation of pigment from the destroyed red cells, which the liver is not able to handle. Statistics show that 60 per cent of these cases have coincident pigment gall stones.

Two types of the disease occur, the congenital or familial described by Minkowski, and the acquired described by Hayem and Widal. The acquired presents a much more rapid course and in a few years ends in death from anemia or intercurrent disease unless splenectomy is performed. Often in the course of the disease there will occur an exacerbation of the symptoms, as evidenced by malaise, headache, epigastric pain, enlarged and tender spleen and occasionally fever. These crises are more common in the acquired than in the congenital form.

At operation the spleen is usually found non-adherent, and can be readily removed notwithstanding its large size. The best incision for splenectomy in haemolytic icterus is the long midline one described by Bevan. Through this incision the pigment gall stones, so often present, can also be removed. Probably cholecystostomy with drainage will be safer than cholecystectomy, if both pathologic conditions are to be dealt with at one operation. Many excellent sur-

*Chaiman's Address, before the Section on Surgery at the Sixty-third Annual Session of the Mississippi State Medical Association, May 13, 1930.

geons defer the removal of the gall stones until a later date. The results of splenectomy in this condition are uniformly excellent.

Splenic anemia; C. H., a white boy aged 15 years, was admitted to Baptist Hospital January 2, 1925. Father and mother living. Family history has no bearing on the case. The patient has always been a frail, rather undeveloped boy. He has had tonsilitis at times and one attack of pneumonia at 12 years of age. He has had four negative examinations for parasites. In August 1924, he vomited at least a pint of blood. For three or four days after this his stools looked tarry. He has had a tumor mass under the edge of his ribs on the left side for three years. Early in November 1924, he had another and more serious gastro-intestinal hemorrhage and was then carried to Dr. John B. Elliott in New Orleans. Dr. Elliott made a diagnosis of splenic anemia and referred him for surgical treatment.

Examination revealed a pale, undernourished boy with marked anemia, secondary type, anemic heart murmur, and large tumor mass in the left upper quadrant of the abdomen, believed to be the spleen. Blood examination—hemoglobin 30 per cent, 3,200,000 erythrocytes, 2,800 leukocytes, differential count normal with exception of four eosinophils. After preliminary blood transfusions a splenectomy was done on January 5, 1925. This was a very difficult and bloody operation. The spleen was densely adherent to the diaphragm and surrounding structures. The following mistake was made during the splenectomy which you are warned against. When the dense adhesions to the diaphragm were discovered, after exploration, it was thought that the bleeding from these adhesions would probably be less if the pedicle of the spleen should be tied before the spleen was delivered from its bed. Of course, the usual procedure is to deliver the spleen and put into the splenic bed a five-yard abdominal pack, wet with warm saline, before dealing with the pedicle. On account of the fragility of the large blood vessels in the pedicle this proved to be quite a formidable and bloody procedure, certainly a mistake, for when the spleen was separated from the diaphragm, etc., the bleeding was alarming even though the pedicle had been ligated. This procedure, as adopted, caused an unnecessary loss of blood during the preliminary ligation of the pedicle before delivery of the spleen. The hemorrhage was so great that the patient's life was only saved by a quick blood transfusion on the table. The blood of the patient's father had been typed and he was waiting in an adjoining room for just such an emergency, should it develop. It is wise to take this precaution when planning a splenectomy for splenic anemia. Splenectomy in splenic anemia is practically always a difficult and dangerous operation. Every safeguard should be thrown around the patient. This boy had a stormy convalescence, developing a subphrenic abscess two weeks later which required drainage. He remained in the hospital two months after which he was discharged in very good condition. He was given six blood transfusions on account of the severe anemia and sepsis from the abscess. In the following May he had another gastro-intestinal hemorrhage, not so severe as the former ones. Following this he grew and developed rapidly. At 19 he was a six foot boy in robust health, able to run a road scraping machine. In January, 1929, he developed influenza and died. During this illness he had another gastro-intestinal hemorrhage, the first in three and a half years.

The diagnostic points in splenic anemia are a marked anemia of the secondary type, occurring in a patient with a large spleen, generally giving a history of recurring gastro-intestinal hemorrhage. There seems to be no curative treatment short of splenectomy, and even after splenectomy, which carries in this condition an operative mortality of from 10 to 25 per cent, the results are by no means 100 per cent good. Not infrequently further hemorrhage occurs after the successful removal of the spleen. As a rule, the hemorrhages are not nearly so frequent or large and they gradually disappear. Splenectomy is conceded to be the wisest procedure.

Most authorities believe that the successful removal of the spleen, fairly early in splenic anemia, will usually prevent the development of Banti's disease, which is a symptom complex first described by Banti, and recognized as the late stage of splenic anemia. In this advanced stage serious cirrhosis of the liver with ascites is added to the picture of splenic anemia.

Report of a case of Banti's disease. J. K. J., aged 29 years, saw mill laborer, admitted to Baptist Hospital, February 9, 1929. His mother died of tuberculosis. About Christmas of 1928 he was treated through a case of pneumonia by Dr. Anderson of Forest. He then developed an abnormal dullness, thought to be an empyema in his left chest. He was sent to a hospital in Meridian but was not operated upon. On February 4 he vomited blood and passed blood in his stools. He was brought to Jackson a few days later, and on admission he was breathing with evident dis-

tress and could not lie on his left side. On examination there was marked elevation of the diaphragm on the left side with crepitant and subcrepitant rales over the base of the left lung. The patient was exceedingly pale and weak. The spleen was felt at the border of the left costal margin. He was very tender over the spleen and the abdomen seemed abnormally full. Blood count—hemoglobin 27 per cent, erythrocytes 1,820,000, leukocytes 3,200, with marked variation in the size, shape and hemoglobin content of the erythrocytes; no nucleated red cells. He was given repeated blood transfusions and general supportive management including liver diet. On account of the pneumonia, pleurisy, and gastro-intestinal hemorrhage, he could not be gotten into shape for operation until March 20, six weeks after admission. During this time he developed ascites which required tapping two or three times. His temperature on admission was 102½° F. In a few days this returned to normal and remained so until after the operation, when he had the usual post-operative rise. On February 27 he had a second large gastro-intestinal hemorrhage and another on March 4. On March 20 a splenectomy was done. The spleen was large and markedly adherent but the operation was completed, with no undue hemorrhage or shock. The abdomen contained several pints of ascitic fluid. The liver was quite small and hard, a very advanced cirrhosis. The gall bladder was atrophied. He had a satisfactory convalescence, only marred by the development of a phlebitis in the right arm, probably caused by the infrequent blood transfusions and other intravenous treatment. He was discharged, greatly improved, April 12, 1929. Since then he has gained rapidly in health and strength, and is now supporting his family by doing hard, manual labor. There has been no further development of ascites and no subsequent hemorrhage. This patient also has epilepsy.

This clinical case substantiates the experimental evidence that the liver has greater power for regeneration than any other vital organ. At operation the liver appeared to be so seriously diseased that a return to normal circulation and function could hardly be hoped for.

Purpura hemorrhagica. This case was fully reported in the May, 1930, number of the New Orleans Medical and Surgical Journal, so only the high points will be touched. Mrs. E. V., referred by Dr. Parkes of Union, June 17, 1929. She was 26 years of age, mother of two children, and six months pregnant. For a number of years she had occasionally had purpuric spots over her body. On June 15 she had a hard rigor followed by high fever. On the sixteenth she began to bleed from her gums and developed marked subconjunctival hemorrhage with many hemorrhagic spots over the body. Following this she vomited blood and her urine appeared to be pure blood. For several days it was necessary to wash the clots out of her bladder. She also had vaginal bleeding. During the first ten days she was in the hospital she was given one gallon of blood by tranfusion, citrate method, four roentgen-ray treatments over her spleen and five doses of calcium chloride in the vein. Under this treatment the acute fulminating symptoms promptly disappeared and by June 27 she was ready for splenectomy. The blood platelets on admission numbered only 24,000. They rose to 90,000 during the preparatory treatment. On June 27 a splenectomy and caesarean section were done at the same operation; no shock, no hemorrhage. In eleven days she was able to be carried home and is now well. Splenectomy in this condition is quite easy as there are no abnormal adhesions and the spleen usually not much enlarged. The platelet count increased with remarkable rapidity after the splenectomy, in this case from 90,000 to 220,000, in 24 hours. In purpura hemorrhagica when the platelet count falls below 50,000 spontaneous hemorrhages are prone to occur.

Kaznelson demonstrated the value of splenectomy as a treatment for purpura hemorrhagica ten or twelve years ago. It is now accepted as the best treatment. Fully one hundred cases have been reported with excellent results. Operation during the acute, fulminating phase of the disease is a very hazardous procedure and every effort should be made to carry the patient over the acute stage before operating.

The characteristic symptoms of purpura hemorrhagica are petechiae and ecchymoses; bleeding from mucous memberanes; prolonged bleeding time; normal coagulation time, non-retactile clot. Dr. Will Mayo states that these cases are alternately better and worse; but always show evidence of the disease which eventally terminates in death. Splenectomy offers a satisfactory treatment.

Traumatic rupture of the spleen. L. H., aged 17 years, admitted to Baptist Hospital June 12, 1929. Six days previously he had been thrown from an automobile striking on his abdomen. He was seriously shocked and complained of pain in his abdomen and to his left shoulder. Later he was able to be carried home but remained very weak, suffering with abdominal symptoms and severe

pain in the left shoulder. In fact, he was brought to the hospital by his father for an roentgen-ray picture of his shoulder. On admission he presented unmistakable evidence of an acute surgical abdomen, with moderate tenderness and rigidity and abnormal fullness. He was markedly anemic; hemoglobin 49 per cent. We found dullness and diminished respiratory sounds over left chest. Roentgenograms showed elevation of diaphragm on the left side with slight mottling of the base of the left lung. Kehr's sign of pain in the left shoulder was most characteristic. This train of symptoms led to a positive diagnosis of rupture of the spleen and an immediate operation was done. On opening the abdomen we found a large quantity of intra-peritoneal blood with many clots between the liver and diaphragm and in the left hypochondriac region. The spleen was found torn in three places and removed. No other evidence of intra-abdominal injury was found. During the operation he was given 1,000 c.c. of blood by transfusion and also 1,000 c.c. of saline solution intravenously. He had a smooth convalescence and is now well.

The diagnostic symptoms of traumatic rupture are a history of injury, evidence of internal hemorrhage of an acute surgical abdomen, and nearly always pain referred to the left shoulder. Treatment consists of prompt splenectomy with appropriate supporting measures. A number of cases of spontaneous rupture of the spleen are to be found in the literature. The symptoms of this condition are as above outlined minus the history of injury.

A most interesting symptom complex is that of sickle cell anemia. This is a condition occurring practically exclusively in the negro race. The combination of a leg ulcer, chronic in character associated with anemia, slight jaundice, recurring fever, joint pain and abdominal pain in a negro would certainly suggest a blood examination. The blood shows typical sickle cells which are diagnostic. Splenectomy cures this disease.

FLOCCULATION TEST FOR SYPHILIS.*

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In spite of the fact that the Wassermann test, as the term is generally used, is not a specific test for syphilis, it is remarkable how reliable it is. I am almost willing to say that when carried out with a reasonable degree of precision, it gives no false positives. Yaws, leprosy and possibly a few other diseases normally give positive Wassermann reactions, but these cannot be regarded as false positives. A specimen of blood which is "hemolized," but not to such an extent as to become anticomplementary, may give a so-called false positive. This is the fault of the specimen rather than the test. We are urging the use of Keidel tubes, because when syringes and bottles are used to collect the blood quite a percentage of the specimens are hemolized. In what percentage the hemolysis is not far enough advanced to cause the specimen to become anticomplementary, but is sufficiently advanced to cause so called "false positives," we cannot say, because we do not get repeated specimens on which to check.

In passing, it might be stated that the hemolysis itself is not responsible for the "false positives;" but the hemolysis indicates that other changes have taken place, probably due to the growth of contaminating organisms.

Since, in spite of the greatest care, there is a possibility that errors may occur, either before the specimen reaches the laboratory or in the laboratory, in all cases in which the diagnosis is based largely on the laboratory report, one test is not sufficient. The test should be repeated as a check. I want to place particular stress upon this. It applies also to any other laboratory test.

*Read before the Section on Hygiene and Public Health at the Sixty-third Annual Session of the Mississippi State Medical Association, Vicksburg, May 14, 1930.

Although, excluding errors not inherent in the test, a positive Wassermann is of the greatest significance, this is not true of a negative Wassermann. The test is negative in the early stages of the disease and also later when the disease is less active. Some syphilologists say that as high as 25 per cent of the cases of syphilis have a negative Wassermann. In treated cases, the Wassermann becomes negative long before the patient is cured. The ingestion of alcohol within 24 hours previous to the time the blood is taken may cause a positive Wassermann reaction to become negative.

Recognizing that the Wassermann test is not as sensitive as could be desired, efforts have been made to increase its sensitiveness or to devise some other test to take its place. Most of these modified Wassermann tests and these substitute tests have introduced technical factors which render them more liable to error than the simpler Wassermann test, which can stand a surprising amount of abuse.

Kline and Young have introduced a microscopic flocculation test for syphilis which is much simpler than most of the flocculation tests and is therefore less liable to technical errors. The claims made for this test are that it is more sensitive than the Wassermann test or than other flocculation tests, that it does not give false positives with "hemolized" specimens, and that it gives a very small percentage, if any, of false positives due to any cause. In Kline's series of 9,000 tests, which were carefully checked clinically, there were only ten positives, when using a "very sensitive" antigen, and only one positive, with a "sensitive" antigen, in which syphilis could not be demonstrated clinically. The test is not satisfactory for use on spinal fluid.

I have personally run about 10,000 flocculation tests in conjunction with the routine Wassermann test. Unfortunately, at the State Hygienic Laboratory we are not able to correlate very closely laboratory findings with clinical findings because of neglect on the part of physicians to fill out data slips. However, our results indicate that the flocculation test will become positive earlier in primary syphilis, that it will remain positive longer in treated cases, and that it will be positive in some old untreated cases when the Wassermann test is negative. With the "sensitive" antigen I have found about 10 per cent more positives than in the Wassermann test and with the "very sensitive" antigen about 25 per cent.

What we are now particularly interested in is to determine whether the flocculation test gives any false positives and if so, to what extent.

To make an evaluation of the flocculation test we need more clinical data than we are getting. The information which should be included on the data slip, in addition to name or identification number, age, sex, and color, is:

Symptoms—A very brief statement of the principal symptoms. The duration of the lesion if it appears to be primary.

Treatment—Kind, amount, and recency of antisyphilitic treatment. If none, so state.

Previous Wassermann—Date and results.

On the whole I am very favorably impressed with this flocculation test. However, I am not yet ready to substitute it for the Wassermann since all too frequently the physician accepts a laboratory report of a positive Wassermann as a diagnosis of syphilis, and the same would hold true for the flocculation test. Nor am I yet convinced that it would give enough additional information to justify running it as a routine in conjunction with the Wassermann.

DISCUSSION.

Dr. F. M. Smith (Vicksburg): I am a little at a loss to know what I am expected to discuss, inasmuch as I have not been in a laboratory as a worker or technician for a number of years. In this paper there is much of interest, but to attempt any discussion of its value from the standpoint of the pathologist or laboratory man—I know nothing about it. I know nothing of the technic. But I am bringing you this little item of information,

as health officer of the City of Vicksburg and Warren County. We have a lot of laboratory work done, six months by one laboratory and six months by another; both in charge of competent men. We have not done a great amount of examinations of the blood for syphilis, but in the past eighteen month we have had about 300 examinations made on food handlers, on expectant mothers to be tended by midwives and on midwives. One laboratory gives us a report on the Khan test, the other gives us Wassermann, flocculation and Kahn. In studying these reports I find one significant thing. I have never seen a positive Wassermann, even though 1+, that there was not on the same specimen, when a Kline and Young was run at least 2+, or sometimes 3+. The same is true with the Kahn. I have never seen a positive Wassermann that did not give me a positive flocculation test. Our specimens have been few, but it would seem that wherever there is reaction to the Wassermann we can expect a greater reaction from the flocculation test. I have seen cases in which the Wassermann was 1+, while the Kline & Young ran 3+ and 4+, and the Kahn 3+ and 4+. It seems to me therefore that the flocculation test must be very valuable. It is always present when the Wassermann is positive, sometimes present when you get a doubtful Wassermann test.

Dr. Leon S. Lippincott (Vicksburg): I can only agree with Dr. Kemmerer. I have not as many tests to report as he has, but we have been doing for about two years the Kline and Young and the Kahn tests along with the Wassermann. We are running the Wassermann test with three antigens, the Kahn with three antigen dilutions, and the Kline and Young with sensitive and very sensitive antigens. We have done more Wassermann tests than either of the others. In that time we have done something over 6,000 Wassermann tests, 4,500 Kahn tests, and approximately 4,500 Kline and Young tests. We have found our Wassermann tests 4-plus with all three antigens in 4 per cent of cases, Kahn tests in 7 per cent, and Kline and Young tests in 5 per cent. When we consider those tests that are not quite 4-plus all the way, we think that a 2-plus to 4-plus reaction means syphilis. In all tests giving a 2-plus reaction or stronger, the Kahn test was positive in 17 per cent and the Kline and Young test in 18 per cent, against 11 per cent for the Wassermann test. Then we come to those tests that we call doubtful—the 1-plus and plus-minus reactions. If for diagnosis, we ask for repeat tests. Here the Wassermann runs 5 per cent, the Kahn 2 per cent and the Kline and Young 3 per cent. Here is an advantage over the Wassermann. We do not get so many doubtful reactions.

With the Kahn and Kline and Young tests we are not bothered by anticomplementary sera. However, we have little trouble from this source with the Wassermann tests. To my mind, an anticomplementary serum means poor technic in taking or handling specimens. If the specimens are taken and handled properly, there will be few anticomplementary sera.

It is unusual to find a definitely positive reaction with the Kahn and Kline and Young tests with an absolutely negative Wassermann test. I have had an advantage over Dr. Kemmerer in that I have had the opportunity to know the clinical side of many of the patients from whom our specimens come. Our doctors are delighted with the Kahn and Kline and Young tests. We get an early diagnosis after infection, and we find positive reactions in cases that have been treated, long after the Wassermann test is negative. Sera from patients that say that they have had negative Wassermann tests for five or six years, will show a 2-plus, 3-plus, or even a 4-plus reaction with the Kahn and Kline and Young tests. When these patients receive further treatment, they get better. I believe we are finding sphilis with these tests in patients that would be considered free from syphilis were the Wassermann test alone used.

With spinal fluid the Kahn and Kline and Young tests are not so good in our hands. In the past two years we have done the Kahn test on 42 spinal fluids, the Kline and Young test on 58 and the Wassermann test on 106. I have not seen a complete 4-plus reaction with the Kahn and Kline and Young tests. We get a 2-plus to 3-plus when the Wassermann reaction is 4-plus. For spinal fluids I prefer the Wassermann test.

I am not ready to give up the Wassermann test for blood specimens, but if I could only have one test, I would use the Kahn or the Kline and Young, which is somewhat simpler to perform than the Kahn.

Mr. C. A. Palmerlee (Jackson): I have not had much experience with the Kline and Young flocculation test. I have used the Kahn for seven years in connection with the Wassermann. I have the opinion that the Kahn has some advantage over the Wassermann, by checking in spinal fluid tests. The Wassermann test is merely a symptom test for syphilis.

Dr. Hardie R. Hays, (Jackson): My reason for bringing this paper to your attention was that I have found this test of help very often when chancre was present, and germicide and calomel and other things have destroyed the chance of early diagnosis, since one is able to get a flocculation test away ahead of a Wassermann. While I do not endorse going ahead with treatment right away, because I believe in building up the resistance, I can advise my patient and prepare him

for long continued treatment by getting an early flocculation test, and I think even with a negative Wassermann or negative Kahn maybe you will have a positive flocculation test and be on your guard.

Dr. T. W. Kemmerer (closing): The specimens are sent in to the laboratory through the mail and may be twenty-four hours in transit. Where specimens are collected in the hospital or in the laboratory I agree that there will not be so much variation, and if they can be sent to the laboratory immediately they are more satisfactory. Dr. Smith made the statement that all these positive Wassermanns give a positive flocculation test also; that is as it should be. Occasionally we find a positive Wassermann with a negative flocculation test, and we are of the opinion that these are false positives. We send for another specimen, and as a rule when we get that second specimen we get a negative Wassermann as well as a negative flocculation. The important thing for us to determine is whether the Kline and Young flocculation gives any false positives. Until that time we must be careful in accepting it for early diagnosis in chancre. I hardly believe, however, that it will give a false positive.

WHAT RESULT MAY WE EXPECT IN TREATMENT OF ALLERGIC DISEASES?*

NARCISSE F. THIBERGE, M. D.,

NEW ORLEANS.

The most satisfactory results and by far the largest number of cures are obtained in cases of food allergy. Next come asthmatic children, though cures are observed in a fair number of adults with asthma. Hay fever still remains our greatest problem. Quick and spectacular improvements, all distressing symptoms abruptly ceasing under co-seasonal treatment are often noticed in the midst of the season. In others all symptoms disappear for several years and a mild recurrence occasionally appears, but these yield to a short course of treatment. In a questionnaire to 75 physicians co-operating with us and managing the subsequent treatment of hay fever cases, tested by us, 15 per cent of these were reported cured, 3 per cent not responding and the balance improved, some to a marked degree.

In the analysis of about 4000 cases of allergy the above conclusions have been reached, uninfluenced by the enthusiasm of the patients who have been benefited or by the pessimism of those who apparently have not responded to the treatment. A large number of hay fever cases reacting and aggravated by initial doss of pollen extract, after a proper adjustment of doses, eventually yield favorable results. A stormy beginning usually means a final cure. The fear of acute reactions, however, serves as a good check for the allergist's enthusiasm, but must not discourage him. A careful increase of dose and the use of the intradermic route will reduce this danger to a negligible point. The allergist requires an infinite amount of patience and courage to persist in the face of apparent failures. He must possess confidence and perseverance himself to be enabled to inspire his patient with a like confidence. A desentization course is prolonged and it certainly cannot be permanently accomplished through only a dozen treatments.

A patient with pains in his lower right quadrant after appendectomy cannot be said to have appendicitis; nor does one suffer a recurrence of his arthritis, who happens to have a pain from strain. The leutic seen early and given appropriate treatment may have pharyngeal symptoms; this does not spell mucous patches. When discussing results one must realize that an asthmatic or hay fever sufferer once cured, may later develop an acute coryza, but this does not mean that all his treatment has been in vain. Such fears are groundless; on the contrary, he will recover much quicker than those of his household affected, because his previous treatment has taught him to be on the alert. Personal records show that after an apparent recurrence, 3 cases of hay fever free from symptoms for 5 years, only required a short subsequent treat-

*Read before the Orleans Parish Medical Society, May 26, 1930.

ment. Though the susceptibility to colds may remain greater, one who has passed through the ordeal takes heed of the first symptoms and fights it off promptly, provided his morale is strengthened. The medical attendant here can do much to encourage the sufferer and by readjusting his focus, hasten his cure.

Too great a reliance on pollen inoculations alone has done a great deal to hinder the results. It is the writer's belief that any one may become allergic when his resistance is lowered and the exciting cause intense. We all inherit a greater or lesser sensitivity. Here food plays a great part; unless we ascertain which article or articles of diet sensitizes the individual to the point that pollen in the air or miasma of the climate produces in him a reaction, we will never adequately solve any hay fever or asthma problem. Chilling of the body, mental worries, sudden shocks, may so alter the metabolism as to render the food a sensitizing element in its improperly digested condition. We readily see how in these cases pollen desensitization alone will not produce spectacular results, but only throw discredit on the whole question because improperly applied.

Though it becomes at times necessary to send the patent temporarily to an atmosphere entirely free from miasma or pollen, giving him an opportunity to rally, such a step should be considered temporary. When possible, it would be better to place him so he may be exposed to a gradual increase of pollen-laden atmosphere while being disensitized by treatment. He is thereby stimulated to a greater resistance and finally enabled to stand exposure when so enforced by circumstances. Rather than flee at the first approach of the "pollen season" (to which the patient is sensitive), it is far more advisable for him to face the difficulty; and, his system which slowly assimilates this pollen, assisted by the allergist's gradually increasing doses of the extract will, by the immunizing treatment recover far more readily than if he returned when the pollen season is at its height.

The following histories will be of interest:

CASE REPORTS.

1. Asthma—Mrs. M. C. H. suffering from asthma for 7 years. When first seen her appearance suggested tuberculosis, often confined home by severe asthma, past the menopause—sensitive to pollens and wool. Treatment applied hoping only for relief. After 5 years' treatment, spells finally left and have not recurred now for 5 years, except for a short recurrence in 1930. Gained 30 pounds.

2. Asthma—Mrs. J. B. P., W. F., 43, asthma for 8 years. Spells from August to April. Strong allergy for grass and ragweed. Treated from 1925 to 1928; has been free from spells for over 4 years. Re-examined in May, 1930, when she reported that she was still without any suggestion of asthma. Electrocardiogram indicates that heart has returned to normal.

3. Asthma—Paul R., asthma and bronchitis for 5 years, treated for 3 years. Now 15 years old. Completely well for over 2 years.

4. Hay Fever—Mrs. M. A. markedly allergic to pollen, hay fever, from September to May, suffered for 8 years. Treated during 5 years, has now been free since 1925. Reports at regular intervals.

5. Co-seasonal Case—Mrs. H. D., represents what may be accomplished in a type of extremely allegeric patients. Treated for 5 years; free for 2 years; at recurrence, symptoms arrested in the midst of the pollenating season by 700 pollen units. This case is interesting, as her mother and father are allergic and in addition she has a dermographic skin.

Many cases were arrested with co-seasonal treatment by doses of 200 to 900 units.

For the cases with food allergy a suitable diet is usually all that is necessary. Peptone hypo in small doses is sometimes needed. The question is often asked: "Can an allergic patient return to a normal diet?" An enforcement of the diet strictly for nine months is advised after which one article at a time in limited amount may be tried. Generally a fairly good tolerance is obtained, but the patient must not take to excess the food towards which he had previously showed allergy.

CONCLUSIONS.

1. Results in allergic cases are sufficiently encouraging to expect a definite cure for the majority of patients.

2. So far records show positive cures of several years' standing of apparently hopeless cases of asthma and hay fever.

3. The great majority of cases are seasonally cured.

4. Many cases are aborted with co-seasonal treatment.

5. Food allergy can be cured practically in all cases by tolerance being slowly established.

DISCUSSIONS.

Dr. E. L. Leckert (New Orleans): I must confess I have no experience with the treatment of hay fever, although we are all probably interested in this troublesome disease which affects 7 per cent of the population.

The important points that Dr. Thiberge has stressed, are: that pollen, as most sufferers believe, is not the sole cause of hay fever, but that diet and other conditions enumerated, must be considered.

Then, the length of time it takes to cure this disease. I have known patients who, if they are not permanently cured after one series of injections, become indifferent as to taking further treatment. From Dr. Thiberge's report of cases, it appears that treatments must be continued for years, if results are to be obtained.

I think Dr. Thiberge is to be commended for his splendid work, and if the results, particularly the percentage of cures, 15 per cent in hay fever, asthma, and other allied conditions, is maintained, it will prove of great benefit to our patients.

Dr. Efron (New Orleans): Dr. Thiberge is one of the pioneers in the treatment of this interesting and important group of cases. The treatment of hay fever and asthma has advanced to where therapeutic results compare favorably with those of other specialties.

Among the researches carried on by Dr. Penfound and myself has been a complete survey of all the weeds of the city of New Orleans. Such a survey is absolutely essential for the intelligent treatment of hay fever and asthma. We have found that in this city there are about two weeks in the whole year when the air does not contain some pollen.

We have elaborated a new test for seasonal hay fever, which we believe to be much better than the present skin tests. With this method, we spray the patient's nostrils with dry pollen; and, in positive cases, hay fever symptoms of varying severity follow. The tests are carried out at times other than when the patient has hay fever.

I wish to voice my protest against the use of treatment sets on the market. They do not contain the pollens that occur here, nor is there concentration sufficient for satisfactory immunization.

Dr. Thiberge brought up the important question of changing the individual's environment. We have now, and it has been put on the market, a filter which helps to do that. These machines produce pollen free air, and we hope they will aid us. I am now trying five such machines.

I wish to say a few words concerning house dust. House dust is one of the principal causes of winter asthma. Its exact nature has not yet been determined. At times its antigen property is due to feathers, wool or other inhalent substances. At other times these substances do not play any role at all. Some writers believe it owes its antigenic properties to some mold or molds.

Dr. Thiberge is to be complimented on the work he has done. Our patients come to us with a diagnosis already made, and ask for relief. Our results are easily checked by patients and physicians. In many cases we are successful in relieving them; in small percentage of cases we are not. With reference to preseasonal treatment, it is more successful than seasonal treatment.

Dr. N. F. Thiberge: We take a great deal of pride in claiming priority for the New Orleans survey, perhaps not to the extent of the complete survey of the City made recently, but we have in our Clinic a map of a survey made in 1920 of the City of New Orleans and alongside of it another survey of the City for Hay Fever weeds that was made in 1929. The comparison of the two maps shows the good work done by the City authorities in controlling pollenating areas.

About testing by means of inhalation: Though of some value, we have not found it as reliable as the cutaneous route. In our early researches in 1914, we took along with us a man who was susceptible to hay fever weeds and when we wanted to ascertain whether or not a weed was a hay fever weed, we offered it to him for inhalation. This volunteer was extremely allergic and a wonderful help in our researches when he was checked up alongside of immune controls.

About the change in environment: That is somewhat mysterious. We can understand how

a patient in the far South going to Maine or Michigan can be relieved, because here we have a decided change of season which influences the pollen contents of the air, but how can we explain when a patient having hay fever in New Orleans will go to Covington and be relieved, and a patient suffering attacks in Covington coming to the City will have none? It is quite possible to understand how a patient can go from an atmosphere laden with pollen to one that is not so laden and get relief of symptoms, but when you take places in the same latitude as New Orleans and Covington and find that there is relief, it is not so easy. The only explanation is the increase of their resistance by the simulating effect of change in diet or change in living, or the relief of having to fight only one element at a time.

In regard to the machines: We experimented with those put on the market. We understand that an apparatus recently offered on the market is being withdrawn because it did not answer the purpose. I think the last word in machines has not yet been said. We visited the apparatus at the Saenger which is perfect but it cost $280,000, a sum we can hardly expect our patients to afford for comfort in their home.

I want to thank Doctor Leckert, for his encouragement; Doctor Efron for the thorough manner in which he presented his discussion and all of you for your interest.

THE EDUCATIONAL NEEDS OF PRESENT DAY NURSING.*

H. A. GAMBLE, M. D.,

GREENVILLE, MISS.

It is indeed a pleasure for me to be present today in response to an invitation from your President, to be present both as an individual and as the official representative of the Mississippi State Medical Association.

Mrs. Bell asked that my talk be upon the reasons for the Woman's Auxiliary or some allied subject. I quote from Article two of your Constitution and By-Laws:

"The object of this Auxiliary shall be to extend the aims of the medical profession through the wives of the doctors to the various woman's organizations which look to the advancement of health and education; to assist in entertaining at State, District and County meetings; to promote acquaintanceship among doctors' families, that local unity and harmony may be increased."

Being actively engaged in the practice of medicine it is natural that we should place our profession and associated lines of work first and give them probably more study and attention than is accorded non-related subjects.

The first sentence states that "The object of this Auxiliary shall be to extend the aims of the medical profession through the wives of the doctors, to the various woman's organizations which look to the advancement of health and education." I feel that no more laudable object as it affects organized medicine, public health, and all allied efforts could be proposed.

To come to a concrete example—the nurses' profession is most closely allied to that of the practice of medicine, in fact is in reality a subsidiary of it. There are some features, however, in connection with nursing and the preparatory education of nurses which I feel that an organization such as you represent could do much to improve.

First the standard of education for trained nurses is not maintained at as high a standard as is commensurate with the character of work which they are called upon to perform. It has been claimed by some, and they are men eminent in the profession, that nurses should not have a high degree of intelligence or education, but should simply be able to carry out instructions, and do the menial work associated with their profession. After twenty years of intimate association with nurses I wish to say emphatically that I regard a nurse's mission and her work of a type that demands the highest degree of intelligence, the best education obtainable, and that she be thoroughly trained, not only in the various measures necessary in the practice of her

*Address before the Woman's Auxiliary of the Mississippi State Medical Association, Vicksburg, Miss., May 15, 1930.

profession, but that her powers of observation be co-ordinated, and her mind formed so that she be capable of recognizing and interpreting changes which may take place in the condition of the patient under her supervision.

One of the most unfortunate things in connection with the obtaining of raw material for nurses today is that most young women graduate from high school at too early an age to take up the responsibilities of the nursing profession, and by the time they have reached an age of responsibility, they have usually entered some other field of endeavor or vocation in life.

We feel that measures could be taken whereby these young women of desirable attributes could still be drafted into the nursing profession, and at the same time be better prepared from an educational standpoint to take up its obligations.

In some sections of America there are affiliations of the various nursing school with the State schools by which the State institution has established a course of study embracing the fundamentals of nursing as well as the literary studies needed for finishing a nurse's education, which bridges over the two years intervening between the time of graduation and the time of entrance to training as a nurse. These young women are given in accredited training schools for nurses credit for one full year's work, necessitating a nurse to spend two years in active clinical hospital training, at the end of which time she is graduated as a graduate nurse. Should she care to go still further and prepare herself for higher executive work in her profession, the schools have a more advanced course which will fit her for such positions. We are of the opinion that the raising of the standards of education for nurses is essential as an aid to the elevation of the standards of the practice of medicine, and we feel that measures somewhat similar to those employed at the Vancouver General Hospital, and just outlined, would be of great help to the maintenance of these standards. Someone has to make a start, these movements do not start spontaneously, and I have felt that it would be possible for your organization to take the initiative as the Auxiliary of the Mississippi State eMdical Association in bringing about of such educational forces as have been suggested. It would be a great work, a work resulting in great accomplishments, and one that would help to raise our beloved State higher and higher in the type of service rendered the sick.

One other point which I wish to take up with you along a similar line is the undergraduate nurse. To a certain extent, from a sociological standpoint, our State is essentially an agricultural State. We have no large cities and our nurses are recruited from small towns and farms. Ordinarily when they come in as students in the training schools, they are young women of but little experience, who are actuated by the highest of ideals, but who have never been brought into contact with the various problems of life.

The question of the provision of means of entertainment and relaxation for these young women is a very present one. It is wrong to ask that they go into a hospital and submerge themselves, and remain away from social contacts for a period of three years. The human being is essentially a social animal, and if provision is not made for safe, sane and legitimate entertainment and relaxation, these young women are going to of their own accord find some means of expressing the social side of their lives.

We feel that your organization individually and collectively can do much toward educating the communities in which training schools are located toward providing some innocent form of social diversions for those who are preparing themselves for their life work in a most noble profession.

One might say that it is the business of the superintendent of nurses in every institution to see that such provision is made. In a measure this is true, but it is also a

community obligation which we cannot shirk.

I know in our institution, the superintendent has groups of nurses taken out from time to time for picnics, fish frys, provision is made with the Y. M. C. A. for the basket ball team, they are accorded the privileges of the swimming pool, and in various other ways their time when off duty, when they are not engaged in study, is filled with a safe, sane and healthy type of diversion.

I trust that for them may spring some concerted action in the community from which each of you hail; that ultimately we may see both the educational standards of nurses raised as a result of your efforts, and that in a more personal way we may learn of the efforts that each of you are maintaining in your home community in the provision of safe, sane, health-promoting means of diversion for the students of the various nursing schools.

PERIPHERAL POLYNEURITIS.*

A. B. PAVY, M. D.,

OPELOUSAS, LA.

I am indeed sensible of the honor you confer on me in requesting me to discuss a subject of apparently mysterious etiology, namely, epidemic peripheral polyneuritis (jake paralysis). There has been considerable speculation and little scientific investigation of the true etiology of this malady. I think there has been exhibited considerable hysteria and "much ado about nothing" as regards this disease.

It appears that notables in the medical world have pronounced it incurable and in view of this it would seem futile for just general practitioners to challenge the verdict and enter upon further discussion. In the meantime the unfortunate victims must live in hopeless despair. Being sinners, they must bear the ridicule of the unchari-

*Read before the St. Landry Parish Medical Society, May 28, 1930.

table and their infirmity remain the prey of commercialism and charlatanism.

The knowledge which we have gained of medicine is no peculiar possession of individuals in our profession. It has been purchased through the ages at a tremendous expense of human suffering and loss of life. Then, we owe all we possess of medical knowledge to our profession and humanity and it is in this spirit that I discuss this subject.

TYPES OF PERIPHERAL NEURITIS.

In this locality we encounter two common types of peripheral neuritis, namely, alcoholic and that due to beri-beri.

1. *Alcoholic neuritis:* Here this condition is encountered chiefly in individuals addicted to the use, either of undistilled mash or green whiskey. The symptoms correspond in most all respects to any case of peripheral neuritis of alcoholic origin. The onset is insidious usually with pain in the calves of the legs, and cramps in the legs and arms. Moderate swelling of the legs will often be observed. As the case advances paralyses ensue first in the lower limbs, the individual presenting the peculiar "steppage gait" which is with difficulty differentiated from that of locomotor ataxia. Later the arms and hands become paralyzed and the muscular structure atrophies. The sensory reflexes are diminished, the deep motor reflexes eventually disappear. The gastro-intestinal, mental and skin symptoms are typically those of pellagra. This has been our common observation and death from pellagra is the rule in individuals who persist in the use of undistilled mash or raw whiskey. These observations should be interesting to students of pellagra. It would be of scientific interest to investigate the bacteriology of raw undistilled mash toward the end of establishing the true etiology of pellagra. No one who knows pellagra subscribes to the vitamin deficiency theory. Avitaminosis is only a predisposing factor in diseases, the exciting causes are bacterial or plasmodial.

2. *Polyneuritis endemica* (beri-beri). Here the onset may be acute. In this form

the onset though acute is unusually preceded by minor prodromal symptoms for a few days or weeks such as malaise, dizziness, pain in the legs, nocturia and shortness of breath, but some morning during the course of his affliction the patient awakes and finds himself partly or wholly paralyzed in the limbs. On being called to the home of such a patient he may die of acute cardiac failure before any aid can be given. Such cases have been encountered here.

In the typical forms of beri-beri usually encountered here, the presenting symptom is swelling of the legs and cramps in the calves of the legs. The triad of symptoms are gastro-intestinal, cardiac and nervous.

a. The gastro-intestinal symptoms are, loss of appetite, coated tongue, constipation and pain on pressure over the duodenum or gall-bladder region.

b. The cardiac symptoms are: palpitation, dizziness, faintness, tachy-cardia and in the end all the signs of chronic cardiac disease.

c. The nervous symptoms are: pain in the legs, cramps with tingling and numbness. The arms and hands may participate in these symptoms. Later there is partial anesthesia of the lower extremities, the patellar reflexes are diminished. As the case progresses paralyses of the legs and arms with loss of the deep reflexes ensue. The patient then presents the typical signs of alcoholic peripheral neuritis already described. In certain cases wasting and atrophy of the muscular structures of the legs, arms and hands are present. These latter are dry cases of beri-beri. Cases of deafness, loss of speech and partial loss of vision have been observed.

3. *Neuritis arising from Jamaica ginger.* In the few cases which we have observed the peripheral neuritis and subsequent final paralysis correspond in most all respect to that of alcoholic neuritis and paralysis. They exhibit the peculiar "high steppage" gait, which is with difficulty differentiated from that of locomotor ataxia. However, the onset is more acute often beginning with pain in the stomach, fainting and weakness, attended with cardiac palpitation. Or, the individual may retire apparently well and find himself on awakening in the morning unable to raise. In this respect they resemble beri-beri. They do not show any symptoms of pellagra. The urine is of low specific gravity and nocturia and dizziness are commonly complained of; again resembling beri-beri in this respect. The acuteness of onset in certain cases with the attendant gastro-intestinal and cardiac symptoms suggest beri-beri. The wasting and atrophy in the latter stages are typical of dry beri-beri. In this disease dry beri-beri occasioned by the use of decayed ginger root? It would be interesting to investigate the bacteriology of these cases in the light of recent findings of the Japanese physicians of Chiba, Japan, as reported in the Journal of the A. M. A. of April 20, 1929.

PROGNOSIS

To quote Osler, "The course of these alcoholic cases is, as a rule, favorable and after persisting for weeks or months, improvement gradually begins, the muscles regain their power and even in the most desperate cases recovery may follow." In our own experience here in St. Landry individuals with paralysis and pellagra of raw alcoholic origin usually recover on withdrawal of the mash and the institution of proper symptomatic therapeutics measures. The most advanced paralytic cases of beri-beri after months duration, with apparently irreparable cardiac damage recover entirely on withdrawing the source of infection and instituting proper specific therapeutic measures for beri-beri.

Is it not reasonable then to hope that individuals paralyzed from the use of Jamaica ginger should likewise in time recover after the cause of the malady is removed and proper symptomatic therapeutic measures employed? In view of the similarity of this malady to beri-beri no harm can arise from employing the treatment of beri-beri in such cases. I strongly advise it.

CASE REPORTS AND CLINICAL SUGGESTIONS

ABDOMINAL PREGNANCY.† REPORT OF A CASE, PROBABLY TUBAL IN ORIGIN.*

WALTER C. JONES, M. D.,
and
THOMAS J. PARKS, M. D.,
FAIRFIELD, ALA.

CASE REPORTS.

I. M. D., married, colored female, aged 25 years, was admitted to the Employees' Hospital of the Tennessee Coal, Iron and Railroad Company, September 5, 1929, complaining of pain in the lower part of her back, abdominal swelling, and sore mouth. She gave what we thought to be a doubtful history of having last menstruated normally in August, 1928. She bled vaginally in October, accompanied with pain in the lower abdomen, and twice monthly from October until December, during which month she felt fetal movements. From December until April she felt life, but did not bleed vaginally. Beginning in April she began to bleed irregularly from the vagina and to have pain in the lumbar region and abdomen, which persisted until the time of her death. No fetal movements were felt after April.

Past History—One miscarriage at four months; no complications.

Upon admission temperature was 103.4° F.; pulse 124; respirations 24. Gums, palate, and edge of tongue were ulcerated and breath was very foul. Abdomen was enlarged by a symmetrical, rounded mass, apparently arising out of the pelvis. Ballotement was obtained. The fetal heart could not be heard. Upon rectal examination the cervix was found to be closed. The presenting part was not made out. A diagnosis of uterine pregnancy was made with possibility of a dead fetus.

Blood pressure on admission was 120/80. The urine showed a large amount of albumin, a few casts, and pus cells. A positive smear for Vincent's Angina was obtained from the gums.

A roentgenogram taken the day after admission showed a well developed fetus with its feet in the pelvis. The size and bony development appeared normal for a practically full term pregnancy.

The same afternoon at 1 p. m., 1.5 ounces of castor oil were given, followed by 10 grains of quinine sulphate at 2 p. m.; an enema at 3 p. m, and quinine again at 4 p. m.

About 5 p. m. the same afternoon the patient went into mild shock with severe pain in her back, mostly in the region over her left kidney. At 6:00 p. m. she was in severe shock, the body was cold and clammy; she was pulseless and the blood pressure was too low to be obtained. There was no point of tenderness and the abdomen was flaccid. She was in a state of semicoma. Shock was combated with heat, morphin sulphate, caffeine sodio-benzoate, and fluids subcutaneously. Respiration ceased at 8:22 the following morning.

Fig. 1—Well developed and well preserved fetus corresponding approximately to one of a normal pregnancy of about 30 weeks.

NECROPSY REPORT

Gross—On opening the abdomen, about 1,200 cubic centimeters of thick yellow fluid were evacuated, which had been distributed throughout the entire abdomino-pelvic cavity. Most of the peritoneum was much reddened and in many places was covered with a thin, fragile, grayish deposit.

Filling the pelvis and a considerable portion of the abdominal cavity, was a large rather thick-walled sac (Fig. 3), which was mostly reddish gray in color; the posterior surface, however, presented much bluish and greenish discoloration. Through the wall could be palpated the parts of a fetus. Near the center of the left side of this sac, in an area which was gangrenous, was a small ragged opening, about 1.5 centimeters in diameter, through which was escaping a thick yellow fluid precisely like that encountered when the abdomen

*From the Department of Pathology, Employees' Hospital of the Tennessee Coal, Iron and Railroad Company.

†Read before the Jefferson County Medical Society at Birmingham, Alabama, November 18, 1929.

Fig. 2—Inner view of fetal sac with placenta in situ.

was first opened. The sac still contained about 500 cubic centimeters of this fluid.

The placenta was somewhat conical shaped and measured from 7 to 9 centimeters in its various dimensions (Fig. 2); it was attached to the portion of the sac which lay against the uterus. The membranes surrounding the fetus were 2 to 3 millimeters thick, and, posteriorly, in the region of discoloration, they were very fragile and the small parts of the fetus broke through the wall in this location during the removal of the genital organs. The umbilical cord was practically normal in every way, except that it had lost its connection with the placenta. The fetus was well developed and had undergone considerable mumification.

Its weight was 3 pounds after preservation in 10 per cent formalin for three months; length, 38 centimeters. The uterus (Fig. 3) lay against the right wall of the pelvis and measured about 10 by 5 by 3.5 centimeters. The uterine canal was empty and the inner surface was rather smooth, and grayish in color; the length was about 6 centimeter. The parenchymatous organs of the abdomen and pelvis were essentially normal, save the changes already described in their peritoneal coverings.

Microscopic—The peritoneum was very hyperemic and showed much leukocytic infiltration. The placenta presented an unusually small proportion of chorionic villi in its structure. These, however, were well preserved, while the rest of the organ was markedly degenrated; superficially, it showed much leukocytic infiltration. The microscopic appearance of the region of the sac adjacent to the left cornu of the uterus was richly cellular, suggesting somewhat the structure of ovarian stroma. Nothing resembling the structure of the uterine tube could be found.

COMMENT.

The clinical and morbid anatomical findings seem to us to indicate that this pregnancy most likely had its origin in the uterine tube, and, at the end of the second month (as indicated by pain and vaginal bleeding), ruptured into the peritoneal cavity, with its circulation continuing to be received from its tubal attachment. As the pregnancy advanced the left tube and ovary lost their identity by becoming a part of the expanding sac. The fetus probably died at about the end of the thirtieth week. The probable sequence of events leading to the patient's death were purulent inflammation of the sac and its contents, rupture of the sac with extreme shock, and, finally, marked diffuse purulent peritonitis.

Fig. 3—External view of the fetal sac, with right tube and with uterus laid open.

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A NOTABLE ANNIVERSARY.

Seventy years ago, on the twelfth of this September, there was born in Bonnet Carre, Louisiana, a child who was destined to become one of the best known and most famous surgeons in America. Twenty years later Rudolph Matas began the fulfillment of his destiny by being graduated as a doctor of medicine from Tulane University. By dint of hard work, tenacity of purpose and desire to accomplish, coupled with two of natures finest endowments, a magnificent brain and a splendid constitution; now fifty years later, this medical neophyte of earlier days has become the most distinguished medical man of New Orleans and Louisiana, the greatest surgeon of the South, indeed one of the most renowned that American has ever known. The greatness of this New Orleans surgeon has been recognized in this country and Europe. The very real appreciation of Matas' contributions to surgical science, notably in vascular surgery, has been shown by the numerous honors that have been conferred upon him, here and abroad.

It is peculiarly fitting that the idea of an unusual distinction to honor the name of Matas should emanate from the profession of his loved city. Under the auspices of a committee of professional friends and colleagues, with Dr. Isidore Cohn as Chairman, a Matas Festschrift Volume will soon be published. A distinguished list of contributors will make this work notable: Wilkie of Edinburgh, Leriche of Strasbourg, Alessandri of Rome, Pujol of Barcelona, Moure of Paris, and Finney, Crile, Mayo, Reid, Hoffman and Lilienthal of this country are a few among the surgeons who will contribute to the volume, a list of which indicates positively the respect and the admiration with which the name of Matas is greeted throughout the world. Now and in the years to come, may they be many, this Festschrift Volume should prove an unending and continuous source of gratification and pleasure to him to whom it is dedicated.

POST GRADUATE INSTRUCTION.

One of the very definite indications of the need and the desire for the person engaged in the practice of medicine to keep abreast with medical and surgical diseases is exemplified by the very large size of the

Inter-State Postgraduate Medical Association. This organization yearly assembles an audience of thousands of medical men coming from all over the United States. The programs are extremely full and complete, starting early in the morning and lasting until late in the evening. Well known clinicians present diagnostic clinics and give addresses on an extremely varied number of subjects. This year the assembly will be held in Minneapolis the latter part of October, and the program will be prepared by Dr. Geo. W. Crile. A few of the large number of guest speakers include such men as Lewellys F. Barker, L. A. Abt, A. D. Bevan, Harlow H. Brooks, J. B. DeLee, J. B. Deaver, Edmund Grost of the American Hospital in Paris, Emile de Grosz, Professor of Opthalmology, University of Budapest; E. Starr Judd, Dean Lewis, Chas. and Wm. Mayo, W. C. Quinby, Leonard G. Rowntree and A. H. M. J. Van Rooy, Professor of Obstetrics and Gynecology, University of Amsterdam.

A list of men of this calibre certainly will insure a program and presentation of scientific facts from which any practitioner may reap a great store of knowledge.

MEDICAL FACILITIES OF SHELBY COUNTY, INDIANA.

A county which was considered to be a typical community of the middle west United States, namely, Shelby County, Indiana, was selected by the Committee on the Costs of Medical Care to study the facilities for the people of this district by which they might obtain medical treatment as well as to learn how adequate was such treatment and how the costs were proportioned among those who come in contact with a sick individual. The study is most enlightening.

This may be said concerning the expenditures of the people of Shelby County:

The per capita cost of service of physicians was $7.18, approximately one-third of the total. These figures include drugs and medicines. The cost of drugs and medicines not dispensed by physicians totaled $6.34, or roughly 30 per cent of the total expenditures. Hospital care amounted to 15 per cent while the service of dentists totaled 10 per cent. The cultists received 7 per cent whereas the nurse was paid 58 cents per individual, the service that she rendered approximating 2.7 per cent of the total cost. For public health the expenditures were very small approximating 1.3 per cent of the total amount expended. These figures indicate very definitely that in rural communities at least the doctor receives rather a small percentage of the monies expended for medical care. As a matter of fact the drug bill of this community, if the cost of drugs dispensed by physicians are included, surpasses by considerable amount the income of all the doctors in the community.

The Committee on the Costs of Medical Care appreciate and realize that the doctor is not primarily responsible for the expense of illness. His charges represent a comparatively small proportion of the expenses arising from being sick, which, of course, include not only various medical services but also the economic effects of illness on the profession, business or labors of the sick individual.

There are many and diverse features concerning the cost of sickness which must be thrashed out. The one important concern which should interest physician and laity is how to insure adequate treatment without throwing too great a financial burden on the sick man and his dependents, or on him who must finance illness in his family.

HOSPITAL STAFF TRANSACTIONS

VICKSBURG SANITARIUM AND CRAWFORD STREET HOSPITAL STAFF MEETING.

Staff Meeting, August 9, 1930.

Abstract—Ovarian pregnancy. Demonstration of specimen. Dr. G. M. Street.

White female patient, aged 26 years, admitted to hospital July 14, 1930.

Present Illness—History of present illness began five or six weeks ago with sudden severe attack of low abdominal pain, not localized, involving whole lower part of abdomen and pelvis. Some nausea and vomiting and fever for several days and intense soreness. Morphin required once or twice daily for several days for relief. Gradually recovered from first attack and was fairly well over a period of two weeks when a second more severe attack occurred. The second attack was similar to the first, but was more severe and lasted longer. The home physician was undecided as to the cause but thought the attack might be appendicitis. During last attack, menstruation began and was rather profuse for eight or ten days. Had not previously menstruated for over six weeks but nothing was thought of this as patient usually menstruated only every six weeks or two months. Never had had any attacks simulating these before. Family and past history was not remarkable. Once induced abortion about two years ago. Physical examination: Slight muscular rigidity and slight tenderness in both lower abdominal quadrants, legs in midline. Bimanual examination not satisfactory because of tenderness and inability to obtain relaxation of abdominal muscles. However, an indefinite mass was present on the left and a smaller mass on the right. Pelvic organs moderately fixed; abnormal fullness in cul-de-sac.

Temperature, 98.2° F.; pulse, 80. Blood: Leukocytes, 8,200; small lymphocytes, 19 per cent; large lymphocytes, 3 per cent; polymorphonuclear neutrophils, 76 per cent (12 immature forms); polymorphonuclear eosinophils, 2 per cent; no malaria found; Wassermann and Kahn tests negative; catheter specimen of urine negative. Operation—On July 15, low median incision under spinal anesthesia. Much free bloody fluid in peritoneum and pelvis filled with old blood clot. Left ovary size of large orange apparently filled with blood, dark, and same color as old blood clot. Both tubes swollen and edematous and dark in color. Uterus normal in size. Appendix showed chronic inflammation. Blood clots and fluid removed from pelvis; left ovary, both tubes and appendix removed and wound closed with one small drain through lower angle of incision from bottom of pelvic cavity. Pathological report: Chronic inflammation of appendix, right and left tubes. Left ovary: Mass, 2½ x 2¼ x 1¾ inches, irregular ovoid shaped, considerable blood clot adherent one side. On section, at ¼ inch from surface opposite fimbriae of tube is ovoid space, ¾ x ½ x 1/3 inch, containing embryo 3/16 inch in length. Space ruptured at one end with much blood throughout ovary. Microscopic examination showed pregnancy; much blood clot. Patient has made an uneventful recovery.

Abstract—Carcinoma of the upper extremity of the femur, metastatic with pathological fracture as the first symptom. Dr. A. Street.

White female patient, aged 56 years, widow, no children. Chief complaint: Severe pain in region of right hip following a fall shortly before admission. Any motion of the thigh causes intolerable pain. The right hip region has been painful for three weeks prior to this accident. Had had a slight fall three weeks ago but considered it insignificant. Has noticed a mass in the right breast for one year. Examination: External rotation of right thigh; ¾ inch shortening; motion of thigh was very painful. Roentgenogram showed fracture of the neck of the femur, close to the head. The margins of bone at the line of fracture showed rarefaction and gave more the impression of an old fracture than of a fresh one. The head of the femur also showed rarefaction. The shape of the bone was normal except at the site of the fracture. Right breast showed an indurated mass about 1½ inches in diameter in the upper lateral quadrant. This mass was attached to the overlying skin and caused some dimpling. Lesion was undoubtedly carcinoma. No palpable axillary glands. There was doubt as to whether fracture was a pathological one, developing in a bone metastasis from the breast lesion or a somewhat old fracture, resulting from a slight fall three weeks before admission. Plaster was applied with the thigh abducted and patient allowed to go home with instructions to return in five weeks. On returning after five weeks, roentgenogram showed extensive changes in the entire upper extremity of the femur and extending down into the shaft. These changes were compatible with those seen in bone metastasis of carcinoma. Bad prognosis was given. Removal of tissue from the femur for confirmation of diagnosis was recommended. In view of the bad prognosis, the patient decided against biopsy.

Abstract—Chronic pyelitis with acute exacerbations; uroselectan as an aid in diagnosis. Dr. G. C. Jarratt.

White female child, aged 7 years, seen on June 20, 1930. Chief complaint: Fever, nausea

and vomiting. Present illness: Mother stated child was suddenly taken ill yesterday with fever 106° F., nausea and vomiting. Fever continued until about midnight, then became normal, nausea and vomiting off and on until midnight. Had been feeling fine day seen. Past history: Measles four years ago; pneumonia in infancy. Tonsillectomy and adenoidectomy four years ago following measles. Following measles four years ago, child developed high fever with nausea and vomiting. In hospital diagnosis of pyelitis was made. Remained in hospital ten days. One month later had another attack with high fever, nausea and vomiting and was told that condition was due to pyelitis. It was after this attack that tonsils and adenoids were removed as possible causative foci of pyelitis. Since that time, patient has had spells of illness off and on every months or two, illness lasting seven to ten days with high afternoon fever, nausea and vomiting. Child came under observation in this clinic in May, 1929, two years after onset. At that time a diagnosis of sinusitis involving both antrums and ethmoid sinuses was made. Urine contained pus, leukocyte count was increased and differential leukocyte count showed increased per cent of neutrophils. Sinuses were treated by otolaryngologist and alakaline and alternating urotropin and sodium-acid-phosphate therapy instituted. Child recovered from illness in seven days, but continued to show pus in the urine varying from many pus cells to rare pus cells. In February, 1930, child returned with temperature of 103° F., nausea and vomiting. The physical examination at this time was essentially negative; urine showed numerous pus cells with large trace of albumin. Admitted to hospital for stay of four days when temperature became normal. During stay in hospital was given urotropin, sodium-acid-phasphate, and mercurochrome intravenously. After leaving hospital mercurochrome treatments were continued at weekly intervals. The urine continued to show varying amounts of pus but child has had no acute illness up to observation one June 20, 1930. At this time there had been no internal treatments for a period of three months. Family history: Mother living and well; father living and well; only child. No tuberculosis in family. No miscarriages. Physical examination: General appearance was that of a well developed but undernourished white female child, acutely ill and anemic in appearance. General physical examination apparently not remarkable. Urine showed slight trace of albumin; few pus cells. Leukocyte count, 12,600; lymphocytes, 14 per cent; neutrophils, 85 per cent; eosinophils, 1 per cent; no malaria. Widal test negative. Urine continued to show pus cells and leukocyte count remained elevated. On July 4, cystoscopic examination was made. Specimen from left kidney showed some pus cells, no B. tuberculosis, no other organisms by smears or culture. Specimen from right kidney showed some pus cells, no B. tuberculosis, no other organisms by smear or culture.

On July 2, 40 cc. of a 40 per cent solution of uroselectan was given intravenously and a series of roentgenograms of genito-urinary tract made, the first in 15 minutes, second in 20 minutes, and the last one hour after injection. Slight hydronephrosis of the left kidney with hydroureter was demonstrated. Right kidney not plainly shown but ureter normal. No stones or anatomical abnormality of genito-urinary tract seen. Course and treatment: For seven days following onset of illness on June 20, child remained acutely ill, with high fever in afternoon and occasional nausea and vomiting. During this time received large doses of alkali, with symptomatic treatment for temperature, nausea and vomiting. After subsidence of temperature, one injection of three cc. of one per cent mercurochrome was given intravenously. At cystoscopic examination on July 4, there was found slight congestion about the trigone of bladder; catheters slipped easily into pelves of kidneys. Lipiodol was injected into pelvis of right kidney to obtain radiogram as uroselectan did not show conditions satisfactorily; a slightly dilated pelvis was found. Pelvis of left kidney was injected with three cc. of a two per cent silver nitrate solution. One week later another cystoscopic examination was made and three cc. of two per cent silver nitrate solution were injected into the pelvis of each the kidneys. In additon to above, child was given large doses of sodium acid phosphate and urotropin. Since July 11, there has been no pus in urine and no illness. Patient has gained eight pounds in weight, color is much improved and general physical condition is better. It is expected to keep the child on large doses of alkali for a period of three weeks, alternating with urotropin for the same period. It is believed that this treatment will result in a permanent cure.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

ANNUAL REPORTS OF OFFICERS

ADDRESS OF RETIRING PRESIDENT

Dr. E. D. Fenner.

Fellow Members of the Orleans Parish Medical Society; and Ladies and Gentlemen:

It might reasonably be expected that I should make my swan song as President of this Society in the form of an address dealing with some of the problems in which the Public is as deeply concerned as our own profession. The educational campaign to teach the people how they may protect themselves from disease, whereby the ravages of smallpox, typhoid, hookworm disease, and many others, have been so wonderfully reduced; the ever widening circle of medical and surgical knowledge, whose volume has become too great for any man to grasp entire, and has inevitably resulted in the development of the specialist; the disturbing costs of hospital care; the abuse of charity by the well to do whereby the funds devoted by a generous public to the relief of the miseries of the poor are squandered upon the undeserving; any one of these might be the theme for an address since they are matters in which you are every one of you vitally concerned. I have, however, decided to refrain from making an oration and to confine myself to a very brief comment upon my experience as the executive officer of this society.

The past year has been marked by no revolutionary activities, but has been rather a quiet and peaceful progress along well established lines, in the development and execution of policies approved by the membership. Upon assuming the office of President I very definitely decided that I was not born to be a Boss or a Dictator. My experience in the details of the Society's business was extremely limited as I had never held office before. I needed advice on many occasions, and freely sought it of men familiar with the subject. In the appointment of the numerous committees made necessary by the varied activities of the society I tried to select men upon whose activity I could depend to act as Chairmen, and to place on the lists representatives of every shade of opinion amongst the membership. If any one has felt that his length of membership, or his interest in the Society, was not recognized, through failure to be appointed upon one of the Committees, I can assure him that the omission was not deliberate or intentional.

I cannot step down from office without expressing my deep appreciation and gratitude to my colleagues on the Board of Directors for their constant support, and to the Chairmen of the various Committees for the efficiency with which they have discharged their duties. In particular I wish to express to Dr. I. M Gage, the Chairman of the Committee on Scientific Essays, my gratitude for the quality and variety of the programs presented to us, for which his devotion is responsible.

Finally, I desire to extend to my successor, and to the new Board of Directors my heartiest good wishes. Their election without opposition of any sort is an indication of harmony of spirit which permeates our membership. Free from factional division, our energies are devoted to the advancement of Orleans Parish Medical Society, and not wasted upon the gratification of grudges, or purely personal ambitions.

INAUGURAL ADDRESS*

Dr. C. Grenes Cole

Mr. President, Fellow Members of the Orleans Parish Medical Society, Ladies and Gentlemen:

The affairs of the Society during the year of 1929 have been so ably conducted by our retiring President, Dr. Fenner and his ardent co-workers, the members of his board, that little is left for the incoming administration to do.

I feel that if the incoming executive body holds aloft the banner of high achievements already attained and keeps in motion the great wheels of progress which the past administration has set moving we will have, at least, accomplished a great work.

There are many things, however, begun by our predecessors that have not, as yet, been completed and it will be the duty and pleasure of the incoming administration to forward the advancement of these measures to full completion when possible.

Most important among these is Hospital Abuse. This administration pledges itself to keep alive this great issue and an active committee will be appointed for this purpose.

I believe, through the activity of this organization, that much has already been done on this subject, but there are greater things to be accomplished in the future and we should lend our every energy and support to this meritorious undertaking. While our dear Charity Hospital is guilty in some measure there are other institutions, in

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*Read before Orleans Parish Medical Society January 13, 1930.

my opinion, comparatively more guilty and have less excuse for this abuse. You cannot unfortunately legislate against these offenders as was done against the Charity Hospital, and this makes it more difficult to correct.

I believe, at present, the Superintendent and Board of Administrators of the Charity Hospital as at no other time are more in sympathy and accord with our fight against hospital abuse, and it is hopeful that our efforts to correct this evil will soon bear fruit and eventually be crowned with success. This will not come or cannot be expected to come in a day or a year or years, but let us ever be alive to the issue and some day we will come to a realization of our dreams.

Another important subject which stands out in grand review is the work to be done by our Publicity Committee. This committee can accomplish much for the good of our organization and the public, and establish confidence which will be mutually beneficial to all. The public is crying for real and true facts regarding many subjects of daily interest for the welfare and betterment of suffering humanity, and this information can only be given intelligently by the members of our profession and this organization should be the fountain head from which this information and advice should spring.

I am informed that the daily press has expressed a desire to cooperate with us in educating the public health matters and to help establish a closer relationship between the medical profession and the public, and it is sincerely hoped that our publicity committee will function in a manner to establish a more cordial feeling between our organizations and the press which will assure us of their support in this purely educational campaign.

Your Legislation Committee will probably again be called to the colors to defend organized medicine against charlatans and quacks in their attempts to destroy or lower the high standards or requirements now demanded by our Board of Medical Examiners as embodied in our Medical Practice Act.

Our present Board of Medical Examiners are always alert and eagerly watching any planned assault on the organized and legitimate practice of medicine. We wish to assure this Board of our hearty support and cooperation at all times.

Within the ranks of this Society this administration shall recognize no politics and its affairs shall be conducted for the benefit of organized medicine and it is sincerely hoped that the entire membership will feel that this is their organization and without their loyal and united support the Executive Body can accomplish but little.

Our scientific programs should be made as attractive as possible, and I earnestly appeal to you individually and collectively to attend these meetings and encourage the committee and essayists in their efforts for your betterment and entertainment.

There are many other issues of importance that will come up for action which I shall not mention tonight, and the Executive Body shall always give them the attention they deserve and ask for your indulgence and help in our efforts for their solution.

The applauding public which witnessed the masterly presentation of the "Sea Beast," as portrayed by John Barrymore, whose art is worthy the talented American forebearers from whom he springs, thought exaggerated the pictured torture he suffered in having his amputated leg immersed into a pot of hot tar; yet less than one hundred years ago this was scientific surgery.

It was only in 1800 that surgery was divorced from butchery and placed among the sciences when the English Parliament, after repeated refusals, granted a charter to the Royal College of Surgeons, and after Lord Thurlow had publicly proclaimed that there was no more science in surgery than in butchering.

Prior to 1800 surgery had no place among the sciences, although medicine had a well established and honorable status.

From Hippocrates, 460 years before Christ, to 1800 Anno Domini, surgery made little advance. Two great discoveries before 1800 influenced the progress of surgery; Harvey's in 1628 establishing the circulation of the blood, augmented by Nalpighi's discovery of the capillary system in 1661.

Prior to these discoveries, hemorrhage was mysterious, and presumed to be in obedience to the command of God; and only operations of dire necessity were ever attempted.

The second fundamental discovery, was John Hunter's (who was born in 1728) and refers to inflammation, the healing of wounds by blood clot and the ligation of the vessels in their continuity.

These two great discoveries prior to 1800, and the two great discoveries after 1800, viz, Anesthesia and Antiseptics raised surgery from butchery, and, in less than 100 years, had placed it at the apex of the loftiest science of all times for the betterment of the human race.

From the days when barbers were chief surgeons, to the days when the brilliant mind and matchless executions of our own Matas, command the admiration of the world, is a short time; paralleled, possibly, for the rapidity of its evolution, only by the astounding discoveries and development of aviation and radiation; and great though these latter be, they must, as regards the general welfare of humanity, take rank subordinate to surgery.

The most fascinating subject of contemplation, is the evolution of surgery, the discovery and employment of anesthetics; the discovery and practice of antiseptics; the discovery and application of modern therapeutics and diagnostic aids, and the improvement of old, and the discovery of new operations, constitute the world's greatest achievements in an age of the world's greatest development; and of these, anesthesia, outranks them all; and for this wonderful boom to suffering humanity, although gratefully used throughout the civilized world, the world is confessedly indebted to America.

But, my friends, I do not intend to bring coal to Newcastle upon this occasion; nor to make the American Eagle squeal; nor to delay you by references to the great accomplishments of our noble profession, which to all of you are trite, but permit me to express my keen appreciation for the honor you have conferred upon me in calling me to the presidency of this Association. Certainly it is the most prized distinction which has come to my professional life, and, probably will be surpassed by no other.

The progress and development of medical science during the past half century, has exceeded its combined accomplishments of all prior ages; and to be found fit, by this august body, for the exalted office to which you have elected me unopposed is a compliment for which I am sure I am more indebted to your kind and considerate friendship, than to any professional merit of my own.

Occupied as you know I am, by the daily demands of an active practice, you cannot expect me upon this occasion to present to you a beautiful boquet of roses, culled from the flowery fields of literature, posing in a vase of precious ore, plucked from the hidden caves of the classics; but you will pardon me if I take advantage of this opportunity to express myself, radical though it be, upon a subject very dear to my heart.

Excepting only Religion, our glorious science is the most important field of human endeavor; and because of the opportunity it offers for material aggrandizement, the temptation is strong to subordinate to the petty benefits of individual profits, its grander opportunities for human welfare.

To withstand these temptations is obedience to professional ethics. So important is it, I am radical enough to predict a time when the practice of our profession for personal profit will be prohibited, and its licensed members, limited to scientists, paid by governmental bounties, and secured against infirmaties and age, by governmental pensions.

Physicians and surgeons are public benefactors; and their researches and discoveries, ultimately, will be protected by government against the harrassments and distractions incident to personal concerns and family affairs.

No practitioner will be admitted to the profession whose object is financial gain or individual profit.

Our aim should be, exclusively, the expansion of medical and surgical knowledge, the alleviation of human suffering and the promotion of human health, utterly regardless of personal gain.

The endowment of hospitals, even though at the expense of the endowment of academic institutions, will advance the betterment of mankind. The Rockefeller foundation of medical research, far more than the University of Chicago, much more greatly endowed, contributes to the greater welfare of humanity, unrestricted by racial or national distinctions.

The value to science of the discovery of radium by Mrs. Curie and her husband, who donated it to humanity without pay, dwarfts the greatest material achievements of Ford and Morgan.

That medicine and surgery should exploit humanity for material gain or individual profit, is shocking to the votaries who worship at the shrine of our idolatry.

Government hospitals and universities for medical and surgical research, expending annually billions of dollars, under the direction and control of altruistic scientists, would be an economy, paying profits in hundred percents, because of the betterment of men, women and children, and the promotion of the general health.

Dreamer though I be, remember our professions produced Pasteur, the greatest human beneficiary of all times, whose life is an example of spiritualized humanity. Individual practitioners, worthy the noble profession he immortalized, have it within their humble power to follow his example of self abnegation and absorbing devotion to our great cause.

When the Lone Eagle thrilled the watching world by his flight from Roosevelt field to Paris, the world went wild; but when our young doctors sacrificed themselves upon the altar of medical experiment and submitted to inoculation from typhoid and other diseases, they were greater heroes.

Within the keeping of this parochial Association, to the presidency of which you have honored me, is this ethical standard of individual sacrifice and professional excellence. Let it be the purpose of this administration to hold aloft the sacred torch, until the holy flame shall spread abroad the glorious conflagration, bringing the whole world of medicine and surgery within the widening circle of its effulgent radiance.

ANNUAL REPORT OF THE SECRETARY ORLEANS PARISH MEDICAL SOCIETY

Dr. H. Theodore Simon

The Secretary begs your indulgence in submitting the following report of happenings, some of which will of necessity be repeated by other Officers and Chairmen of Committees.

The year 1929 has again seen the Society go through one of its most active years in History. The year ended with a total membership of 515 which is exactly the membership of last year. Of this number 486 are Active Members, 23 Associate Members, 3 Interne Members and 3 Honorary Members.

Losses during the year number 20. Of these there were deaths, 5; removals, 6; resignations on account of removals, 5; dropped for non-payment of dues, 4. There was a fair gain, but with the losses deducted the net increase was zero.

Your Board of Directors has on several occasions gone over the list of about fifty eligible doctors and personally seen some of these men endeavoring to obtain their applications for membership. Your Secretary feels that everything possible has been done to bring in all reputable physicians in the Parish of Orleans.

MEETINGS

The Board of Directors has held ten meetings. Many matters were brought to them for consideration and each and every member cooperated in an endeavor to dispense with these various matters.

The Society has held 16 meetings which included joint meetings during this year. Of this number there was the Installation Meeting, 3 Quarterly Executive Meetings, 3 Joint Clinical Meetings with the Charity Hospital Staff, one meeting as the guest of the United States Marine Hospital Staff, one joint meeting with the New Orleans Gynecological and Obstetrical Society and the Stanford E. Chaille Oration.

The Chairman of the Scientific Essays Committee, Dr. I. M. Gage, is to be congratulated on the interesting programs presented during the year. One of the outstanding meetings was held during the State Society meeting when the Canti Cancer films were shown.

The Society had the pleasure of having four guests present to read papers, namely:

Dr. Carl Henry Davis, Milwaukee.

Dr. W. C. Rucker, U. S. Marine Hospital, New Orleans.

Dr. J. H. Watkins, New Orleans.
Dr. Earl Garside, New Orleans.

CHAILLE MEMORIAL ORATION.

The fourth oration commemorating the memory of Dr. Stanford E. Chaille was held December 6. Dr. Willard E. Rappleye, Director of Study, Commission on Medical Education, New Haven, Connecticut, was the orator. There was a splendid attendance at this meeting.

BY-LAWS.

The section of the By-Laws pertaining to Membership was amended to allow doctors residing in the 1st and 2nd Congressional Districts to become members of this Society.

One of the outstanding happenings during this past year was the organizing of the Women's Auxiliary in Orleans Parish.

A new contract was signed with the New Orleans Medical and Surgical Journal to publish the proceedings of your Society, whereby it shall run for an indefinite period with privilege to cancellation by either party with three months notice.

HISTORY.

The History of the Orleans Parish Medical Society being written by Dr. A. E. Fossier is not quite completed. The members are still sending in their photographs for this History, and those who have not already done so are requested to send their pictures in at once as this publication will be ready in the early spring.

The Society turned over to the State Society a check to cover the subscriptions sent in by the members for the Matas History.

The Senators and Representatives from Louisiana have been solicited to use their influence for the establishment of a Diagnostic Center in New Orleans in view of the fact that the Veterans Hospital at Algiers was moved to Alexandria.

The plans for office space in the new Tulane Medical School were accepted by the Board of Directors, and it is hoped that the first meeting following our summer vacation will be held there.

The annual dinner held December 14 at the Chess Club was a testimonial dinner in honor of Dr. John H. Musser, President of the American College of Physicians and Dr. C. Jeff Miller, President-elect of the American College of Surgeons. It was well attended.

A doctors' golf tournament was held at the Metairie Golf Club during the year.

GROUP INSURANCE.

The rate of premium on group insurance was slightly increased. 216 members are now carrying this insurance. Three premiums were paid to beneficiaries during 1929.

The following Delegates and Alternates to the Louisiana State Medical Society were elected for a term of two years.

Delegates: Drs. F. M. Johns, John A. Lanford, W. H. Seemann, E. D. Fenner, Henry Daspit, M. T. Van Studdiford, Chaille Jamison, D. N. Silverman, E. L. King, Isidore Cohn.

Alternates: Drs. Randolph Lyons, E. L. Leckert, Jerome E. Landry, J. Birney Guthrie, W. D. Phillips, E. H. Lawson, Paul J. Gelpi, Jules E. Dupuy, Maurice J. Gelpi, John Signorelli.

OFFICE ORGANIZATION.

The work in the office is steadily on the increase, owing to the detail work of collecting and paying premiums on the group insurance and also on account of the many circular letters sent to the membership notifying them of routine business.

I wish to sincerely thank Miss Lucille Maier, our Assistant Secretary-Treasurer for her faithfulness and promptness in her endeavors to cooperate.

I wish to thank the President and each member of the Board of Directors for their hearty cooperation, and in conclusion I wish to express my gratitude to the General Membership for the opportunity they have given me to serve the Society.

Respectfully submitted,

H. THEODORE SIMON, M. D.,
Secretary.

ANNAL REPORT OF LIBRARIAN.

Dr. Daniel N. Silverman.

Number of volumes added to Library during last five years: 1925, 418; 1926, 668; 1927, 870; 1928, 682, and 1929, 1467.

Of the 1467 volumes added during 1929, 177 were received from the New Orleans Medical and Surgical Journal, 783 by gift, 400 by binding, 46 by regular subscription and 61 by purchase. Lists of new titles of recent date have been published month by month in the Journal as have also lists of donors. Suffice it to say at this time that we have received gifts of books and journals from 67 agencies and individuals. The total number of bound volumes in the Library on December 31, 1929 is 15,257.

Twenty-three bibliographies have been added to our files on subjects as listed currently. Material for many others has been compiled, but lack of time has prevented their formal incorporation in our records.

Miss Marshall represented our Library and that of Tulane Medical College at the Medical Library Association in Cleveland and was elected national Treasurer of that body.

The Library helped with Longer Life Week, by furnishing material for the talks to clubs and schools,—statistics on the economic cost of illness, mortality from preventable diseases, etc.

On a basis of permanent loan 225 volumes from our duplicate collection have been sent to the Hotel Dieu to aid in the starting of a medical library at that place.

Four meetings of the Library Committee were held during the year, full attendance and enthusiasm evidencing the interest of the members of the Committee.

Complete financial statement of Library receipts and expenditures is herewith presented.

The Library needs additional funds very badly, in order to fill the many gaps in our Journal files and bind the hundreds of volumes on our shelves which need it so badly.

ANNUAL REPORT OF FINANCE COMMITTEE

Dr. John A. Lanford

To the Officers and Members,

Orleans Parish Medical Society.

Gentlemen:

During the year we have increased the holdings of the Domicile Fund by the purchase of two $1,000.00 bonds. There was uninvested at

the end of the year $1,670.48 of accumulated interest. Taking away the anticipated interest collected for 1930 will enable us to show $38,000.00 par value holdings of bonds in the Domicile Fund at the end of the year.

A consideration of our bank balance as of December 31st, 1929, shows in the general account $1,737.49 against which must be charged the History Fund and insurance collected in advance amounting to $2,576.75 which indicates that the general expense of the organization utilized the entire year's income. It has been the policy of the Board for several years to set aside any surplus that might be present at the end of the year to purchase securities for the Library Endowment Fund, but this fund has not been increased since February, 1927, at which time we had $10,000 par value bonds.

We are having more and more difficulty in meeting the routine expenses of the organization from year to year, and as there is no surplus on hand your Board of Directors, through its Budget Committee, will have to guard every outlay very carefully.

During the year the accounting division has changed its bookkeeping methods, adopting a plan that makes the receipts and expenditures more readily accessible to any interested members of the organization, and also rendering easier the duties of the Auditing Committee.

Altogether the financial condition is healthy. We believe that we will be able, by careful consideration of all indicated expenditures, to maintain our present investments without the necessity of encroaching upon any of the present invested funds.

JOHN A. LANFORD, M. D.
Chairman, Finance Committee.

New Orleans, July 7th, 1930

Orleans Parish Medical Society,
New Orleans, La.

Gentlemen:

At the request of your treasurer, Dr. J. A. Lanford, I audited the books of the Society for the year ending December 31st, 1929 and submit herewith attached my report covering same.

FINANCIAL CONDITION

Domicile Fund		
Gold Bonds	34,395.84	
Cash in Savings' Account	1,670.48	
		$36,066.32
General Fund		
Cash in Bank	1,737.49	
Petty Cash in office	25.00	
Office Fixtures	799.55	
Prepaid Insurance Premium	44.35	
	2,606.39	
Less due the American National Life Insurance Co., collected in advance from the various doctors and not yet due	1,924.25	
		682.14
Library Fund		
Gold Bonds	9,920.47	
Cash in Bank	545.92	
Petty Cash in office	8.04	
Inventory of Fixtures	3,317.08	
Inventory of books	33,226.25	
		47,017.76
Medical Relief Fund		122.53
Net Worth		$83,888.75

The following bonds were purchased during the year for account of the Domicile Fund.

	Rate	Par Value	Cost & Interest
N. O. Cold Storage & Warehouse Co.	6	1,000.00	1,006.33
Yaarab Temple Bldg. Co.	6¼	1,000.00	1,014.79
Dallas, Texas Levee District	5½	1,000.00	970.96
N. O. Female Dominican Academy	5½	1,000.00	1,005.96
			$3,998.04

The funds for the purchase of these bonds were derived as follows:

Credit Domicile Fund's Saving Acct. Jan. 1st	1,585.91	
Grover Stewart Bond called	2,040.00	
Interest Coupons on the Domicile Fund Bonds	2,016.36	
Interest on the Domicile Fund Savings Acct.	26.25	$5,668.52
Less cost of above purchases		3,998.04
Credit balance to the Domicile Fund Savinggs Account Dec. 31st, 1929		$1,670.48

The cash transactions were fully verified and properly recorded. The bonds are held by the Canal Bank & Trust Co. The receipts for these bonds are kept in the Society's bank box in the Canal Bank & Trust Co. The receipts were checked and found correct and in accord with the records in the office.

Respectfully submitted,

L. L. JARREAU, Auditor.

ASSETS

Domicile Fund		
Gold Bonds	34,395.84	
Cash in Savings Account	1,670.48	
		$36,066.32
General Fund		
Cash in bank	1,737.49	
Petty Cash in office	25.00	
Office Fixtures	799.55	
Prepaid Insurance Premium	44.35	
	2,606.39	
Less Insurance premium collected for account of the American National Life Insurance Co., and not yet due	1,924.25	
		682.14
Library Fund		
Gold Bonds	9,920.47	
Cash in bank	545.92	
Petty Cash in Office	8.04	
Inventory of Fixtures	3,317.08	
Inventory of book	33,226.25	
		47,017.76
Medical Relief Fund		122.53
Net worth		$83,888.75

BONDS

Domicile Fund

Name of Securities	Receipt Number	Rate	Par Value	Cost with Interest
Fort Worth Properties	3056	6½ %	5,000.00	5,087.37
Hotel Markham	3054	6	3,000.00	3,018.50
Marine Mortgage Co.	3053	6	5,000.00	5,005.83
Hibernia Securities	3510	6	3,000.00	3,045.90
Pontchartrain Apartments	3057	6½	4,000.00	4,115.20
Gillican Chipley	3510	6	1,000.00	1,005.67
Brown Paper Co.	3057	6	3,000.00	3,033.50
Foster Creek Lumber Co.	3245	6	1,000.00	994.00
Cloverland Dairy Products	3577	6½	2,000.00	2,028.67
B. G. Carbajal, Inc.	3577	5½	1,000.00	1,022.16
Interstate Hotel Co.	3577	6	1,000.00	1,021.67
Clover Valley Lumber Co.	3641	6	1,000.00	1,019.33
			30,000.00	30,397.80
Acquired in 1929				
N. O. Cold Storage & Warehouse Co.	1638	6	1,000.00	1,006.33
Yaarab Temple Bldg. Co. of Atlanta	1901	6¼	1,000.00	1,014.79
Dallas Levee Dist.	1637	5.80	1,000.00	970.96
N. O. Fema'e Academy	1639	5.50	1,000.0	1,005.96
			4,000.00	3,998.04
Total holdings Dec. 31st, 1929			$34,000.00	$34,395.84

The funds available for the purchase of the above four bonds were derived as follows:

Credit balance Domicile Savings Account Jan. 1st, 1929		1,585.91
Grover Stewart Bonds, called	2,040.00	
Interest coupons on the bonds	2,016.36	
Interest on savings	26.25	
		4,082.61
		5,668.52
Purchases of bonds in 1929		3,998.04
Credit balance to the Domicile Savings account Jan. 1st, 1930		$1,670.48

INTEREST COUPONS COLLECTED IN 1929
For Account of the Domicile Fund

Foster Creek Lumber Co.	58.80
Cloverland Dairy Products Co.	127.40
Hibernia Securities	176.40
Gillican Chipley	58.80
Marine Mortgage Co.	294.00
B. G. Carbajal, Inc.	53.90
Hotel Markham Co.	176.40
Pontchartrain Apartments	254.80
Grover Stewart	58.80
Clover Valley Lumber Co.	58.80
Interstate Hotel Co.	58.80
Fort Worth Properties	318.50
Brown Paper Mills Co.	176.40
Yaarab Temple Bldg. Co. of Atlanta, Ga.	61.26
N. O. Cold Storage & Warehouse Co.	29.40
N. O. Female Dominican Academy	26.95
Dallas Levee District	26.95
	$2,016.36

BONDS

Library Fund

Name of Securities	Receipt Number	Rate	Par Value	Cost with Interest
Sinclair Oil Corporation	3249	6%	1,000.00	1,015.19
Holland American Line	3051	6	1,000.00	933.00
Ex. Convention of the Baptist Church of Ga.	2174	6	1,000.00	1,019.50
St. Charles Ave. Baptist Church	2174	6	1,000.00	1,024.50
Gillican Chipley	2694	6	1,000.00	1,151.23
Gillican Chipley	2841	6	1,000.00	986.33
Gillican Chipley	3058	6	1,000.00	1,005.67
Sea-Board Air Line	3257	6	1,000.00	743.56
Clover Valley Lumber Co.	3630	6	1,000.00	1,019.33
B. G. Carbajal, Inc.	3647	5½%	1,000.00	1,022.16
			$10,000.00	$9,920.47

RECEIPTS

Library Fund

Interest Coupons from the following bonds:

Gillican Chipley Co.	176.40	
B. G. Carbajal, Inc.	53.90	
Sinclair Consolidated Oil	68.60	
Seaboard Air Line	39.20	
Clover Valley Lumber Co.	58.80	
St. Charles Ave. Baptist Church	58.80	
Holland American S/S Line	58.97	
Executive Committee of the Baptist Convention of the State of Georgia	58.80	
		573.47
General fund advances		1,200.00
General fund refund		2.36
Total receipts		$1,775.83

CASH

General Fund			
Cash on hand Jan. 1st, 1929		$ 1,239.94	
Receipts			
Insurance premiums	$10,423.24		
Other receipts	13,046.64	23,469.88	
		24,709.82	
Less disbursements		22,972.33	1,737.49
Library Fund			
Cash on hand January 1st, 1929	485.14		
Receipts			
Interest, coupons on bonds	573.47		
Appropriation General Fund	1,200.00		
Refund from Gen. Fund	2.36		
	1,775.83		
	2,260.97		
Disbursements	1,715.05		
Domicile Savings Account			545.92
Medical Relief Fund			1,670.48
			122.53
			$4,076.42

RECEIPTS

General Fund		
Membership Dues	$ 7,821.00	
La. State Medical Soc. dues	1,834.00	
La. State Medical Soc. Rent	240.00	
La. State Medical Soc. telephone	44.72	
Insurance Premium collected for account of the American National Insurance Co.	10,423.24	
History Fund	287.50	
Legislative Fee	73.00	
La. State Medical Soc. refund	3.84	
Certificates of deposits cashed	2,500.00	
Interest on Certificates of deposit	37.22	
Dinner Fund	132.00	
Miscellaneous	73.36	
Total receipts		$23,469.88

DISBURSEMENTS

General Fund

N. O. Medical & Surgical Journal, Subscription	300.00		
Petty cash, Miscellaneous expenditures	288.94		
E. E. Weidig, stove repairs	15.68		
Telephone and Telegraph	282.04		
J. B. Ilg, ice	282.04		
Printing and stationery	334.90		
Heat and light	157.30		
Meeting notices	26.01		
Dr. Simon, Honorarium	122.00		
R. J. Brou, locksmith	6.50		
Office Supplies	26.32		
Clem Hearsay (publicity man)	120.00		
The Rosery, floral offerings	33.27		
J. Mann, electrician	10.71		
H. C. Parker, filing case	11.00		
Dr. Gelpi, dinner, fund	123.00		
Ass'n of Commerce, yearly dues	25.00		
U. S. Fidelity Guarantee Inc. Co.	7.50		
Sam George, insurance	96.34		
Emile Jastram, Long Life Week sign	35.28		
Commissioners of election	15.00		
J. B. Crasto, window panes	4.80		
Canal Bank, bank box	5.00		
Library Account, advances			1,200.00
Whitney Bank, certificates of deposit			2,500.00
Vaughan Transfer			5.68
T. Semmes Walmsley, legal fee			50.00
Dr. T. J. Henderson, refund on insurance overpaid			9.93
Harcol Film Co.			56.02
Dr. Clay Thomas, dues refund			9.00
Dr. Wallace Rappleye, Chaillé Oration			250.00
American National Ins. Co.			9,341.17
La. State Medical Society			2,685.00
Expenses incidental to installation meeting:			
Dr. Gelpi, Paul	20.00		
Philip Werlein	9.80		
Leon Hirsch	9.80		
Consumers Bottling Works	.90		
N. O. Ice Cream Co.	7.64		
Happiness Candy Store	12.00		
Zahn Bros.	10.00		
			70.14
Miscellaneous expenses			54.50
Salaries			
Marshall, M. L.	1,200.00		
Billon, M.	1,200.00		
Maier, L.	1,380.00		
Jas. Dobard, Tulane porter	60.00		
Tim Grayson, Tul'e porter	60.00		

Carl Coleman, regular porter	600.00	
Miss Grace Lewis	16.00	
Miss Margaret Marx	20.00	
Miss Helen Latrop	50.00	
Jarreau, L. L.	50.00	
		4,636.00
Return items		18.86
Total disbursements		$22,972.33

DISBURSEMENTS

Library Fund

Books		
J. A. Majors & Co.		365.04
F. A. Cooksley		2.96
A. M. A.		12.00
B. Logan & Co.		17.17
Oxford University Press		8.10
Interpreter Publishing Co.		18.00
Heidelbeck Jackelheimer		73.35
C. D. Rainey		11.00
General Medical Book Co.		7.00
M. Marshall		21.41
Geo. W. Rueff, Inc.		5.00
D. Appleton & Co.		7.50
Walter Exkert		48.95
Remington Rand Co.		15.90
Vaughan Transfer Co.		33.10
Abstract and Research		
Oxford University Press		10.78
W. F. Prior & Co.		15.00
A. M. A.		.50
Thomas Nelson		15.00
Binding		
Am. Medical Assn.		none
New Method Bd. Co.		533.45
M. Marshall		10.55
Vaughan Transfer		33.96
Journal Subscriptions		
H. W. Wilson & Co.		10.00
Medical Review of Rev.		4.00
Book Seller & Printing Co.		3.50
J. A. Majors & Co.		232.47
Petty Cash		70.51
Miss M. Marshall, trip to Cleveland		75.00
Office Supplies		28.17
Medical Library Assn.		10.00
Wetzel Printing Co.		15.68
Total disbursements		$1,715.05

INVENTORY OF BOOKS

Library Fund

Inventory of books on hand January 1st, 1929			$29,350.81
Purchased in 1929:			
Books	646.48		
Binding	577.96	1,224.44	
Books acquired through other sources:			
*Gifts 783 @ 2.00		1,566.00	
*N. O. Medical & Surgical Journal 177 @ 5.00		1,085.00	
			3,875.44
Total			$33,226.25

*Estimated by Miss Marshall, assistant librarian.

MEMBERS ADMITTED DURING THE YEAR

Active members and dates elected:

Jos. N. Ane, April 1, 1929; J. J. Baron, July 1, 1929; Henry Bayon, Jr., March 4, 1929; *A. F. Brock, July 1, 1929; C. J. Brown, July 1, 1929; E. Z. Browne, June 3, 1929; Edgar Burns, October 7, 1929; †L. C. Chamberlain, July 1, 1929; S. A. Chapman, December 2, 1929; R. J. Christman, April 1, 1929; T. E. Clements, July 1, 1929; F. W. Dirmann, June 3, 1929; D. J. Farley, October 7, 1929; J. R. Flowers, May 6, 1929; *J. B. Gooch, March 4, 1929; B. R. Heninger, June 3, 1929; A. N. Houston, July 1, 1929; *Park Howell, April 1, 1929; Keith Kahn, February 4, 1929; H. W. Knight, May 6, 1929; M. Malowitz, July 1, 1929; *Clarence May, July 1, 1929; Paul R. Meyer, October 7, 1929; C. J. Miangolarra, October 7, 1929; G. C. Miramon, October 7, 1929; *E. S. Peterman, May 6, 1929; S. B. Saeiwitz, October 7, 1929; P. J. Saleeby, March 3, 1929; Suzanne Schaefer, January 7, 1929; J. T. Scott, Jr., December 2, 1929; R. F. Sharp, March 4, 1929; *G. L. Smith, October 7, 1929; *J. L. Smith, May 6, 1929; W. R. Strange, July 1, 1929; R. A. Strong, October 7, 1929; *P. F. Wilson, July 1, 1929, and D. R. Womack, June 3, 1929.

*These doctors did not qualify.

†Reinstated.

Associated members:

E. C. Faust, H. B. McIntyre, and S. L. Tiblier.

Interne members:

D. C. Roberts, C. McD. Smith, and E. B. Weinfield.

Resigned members and dates of resignation:

Frank J. Beut, December 20, 1929; Aldo Castellanni, June 1, 1929; Wm. B. Gale, October 11, 1929; W. Morgan Johnson, December 1, 1929; Meyer Newhauser, December 9, 1929, and Benj. W. Ward, December 13, 1929.

Four members were dropped for non-payment of dues.

Deceased members and dates of death:

A. O. Hoefeld, February 5, 1929; J. E. Pollock, February 18, 1929; A. R. Thomas, June 9, 1929; C. V. Unsworth, December 5, 1929; E. B. Weinfield, March 4, 1929.

INSURANCE POLICIES

Number of Years	Insurance Company	Agent	Policy Number	Nature of Policy	Amount of Insurance	Premium	Date of Exp.
3	Hudson Ins. Co.,	S. George	373463	Fire	$11,000.00	$140.80	2- 1-30
3	Hudson Ins. Co.,	S. George	373465	Fire	3,000.00	38.40	1-19-30
3	Stuyvesant Ins. Co., Corales	J. A.	1361495	Fire	9,000.00	78.98	9- 2-31
					$26,000.00	$296.58	

EMPLOYERS' LIABILITY INSURANCE

Insurance Co.	Agent	Number	Time	Date of Expiration
Employers' Liability Insurance Company	S. George	452668	One Year	Feb. 15th, 1930

Amount of premium based on amount of pay-roll at end of year.

BONDS OF EMPLOYEES

Dr. John A. Lanford, Treasurer,

United States Fidelity & Guarantee Co., Policy No. 7261-21 renewed for one year February 4th, 1929, Renewal certificate No. 20-03-538-21. $1,000.00. Premium $2.50

Miss L. Maier,

United States Fidelity & Guarantee Co., Policy No. 288-23 renewed for one year October 19th, 1929, renewal certificate No. 20-03-759-23.

PSITTACOSIS.—Harold G. Haines, Warren, Ohio, reports three cases of psittacosis which developed as a result of contact with a sick parrot. These cases simulated typhoid or parathyphoid fever and at the onset were similar to ordinary grip, or influenza. The treatment was symptomatic, similar to that in typhoid (sponge baths, alcohol rubs and the like). Sedatives consisted mostly of codeine for cough or restlessness. For stimulation Haines administered whisky when needed. He used a high caloric diet in all cases, when it was tolerated. The usual prophylactic measures adhered to in typhoid and allied diseases were used in caring for these patients. The outstanding points or peculiar symptoms noticed in the study of these cases were: 1. The insidious onset. 2. The lack of coryza or catarrhal symptoms. 3. Extreme weakness. 4. Constipation. 5. Persistence of headache and backache. 6. White blood cell counts only slightly above normal. 7. No enlargement of the spleen or liver. 8. Rose spots in all three cases. 9. A typical pneumonia in two cases.—J. A. M. A., 94:1821-1822, 1930.

PSITTACOSIS.—L. W. Gorham, Albany, N. Y., and F. G. Calder and J. D. Vedder, Johnstown, N. Y., describe five cases of acute infectious disease, all occurring within a relatively short period among the members of a single household into which there had recently been brought a sick parrot. There was nothing remarkable in the clinical aspect of this series of five cases. The symptoms and physical signs found were those usually encountered in grip, pneumonia or the enteric group of fevers. The white blood counts were uniformly low. Cough when present was unproductive. As a rule the temperature was high and the pulse relatively slow. The bacteriologic study of the blood and stools were entirely negative. The one distinctive point in connection with this series of cases is that every one of the patients was proved to have had close and intimate contact with a sick parrot which arrived in this country from Columbia. House epidemics of an unusual form of pneumonia have been encountered in which there was no contact with sick parrots. One is not warranted, however, in hastily drawing the conclusion from this that all previous epidemics of psittacosis were simply examples of an unusual type of infectious disease, and that the fact that a sick parrot was in the household were merely a coincidence. Although a few rare instances have been reported in which the disease apparently passed from one individual to another, this type of transmission is decidedly unusual and is denied by numerous authors. Hence the danger of an epidemic of serious proportions does not exist and there are no grounds for undue public excitement or apprehension. The etiologic agent in human psittacosis has not yet been definitely established. There is no convincing proof that the bacillus described by Nocard is the cause. Recent studies in England strongly suggest the possibility that a filtrable virus is responsible for the infection both in parrots and in man, and this work has been confirmed recently in this country.—J. A. M. A., 94:1816-1821, 1930.

LOUISIANA STATE MEDICAL SOCIETY NEWS

H. Theodore Simon, M. D., Associate Editor.

AVOYELLES PARISH MEDICAL SOCIETY.

The "Special Meeting" of the Avoyelles Parish Medical Society sponsored by the officers of the local unit held at Bunkie on the night of July third proved a success in all respects. The business and scientific meeting of the physicians was held at the Citizens Bank Building from 7 till 9 o'clock, during which time the guests of honor were entertained at a picture show at the Bailey Theatre—the play being "Joan Crawford—In the Untamed." Dr. Ducote of Bordelonville read a paper at the scientific session entitled the "Uses and Abuses of Morphine." The paper was well received and proved timely and was very well discussed. Many other important problems were discussed. At the next meeting of the society which probably will be held at Plaucheville, Dr. S. J. Couvillon will present the law affecting doctors in the handling of narcotics. The following physicians attended with their lady escorts: Dr. and Mrs. Kirby Roy, Dr. and Mrs. Remy Ducote, Dr. and Mrs. Sam Couvillon, Dr. and Mrs. Walter Couvillon, Dr. and Mrs. Sylvain de Nux, Dr. and Mrs. Emil Regard, Dr. and Mrs. W. A. Quirk, Dr. and Mrs. Albert Bordelon, Dr. and Mrs. E. Stanley Matthews, Dr and Mrs. H. C. Jones, Dr. and Mrs. . M. Haas. Guests consisted of Dr. and Mrs. Frank Grace, Miss Gladys Gardiner, Mrs. Thos. A. Roy and Dr. Fred J. Mayer.

Promptly at 9:30 the medicos and escorts met on the mezzanine floor and the Inn Hotel where they surrounded a festive board filled with all sorts of good eats. With appropriate decorations and menu encircled by the dignified faces of the medical fraternity of Avoyelles and their estimable guests of honor, the affair proved to have been one of the most spectacular and fascinating entertainments ever held by the Avoyelles medicos. Dr. Kirby A. Roy, President of the Avoyelles Medical Society, acted as master of ceremonies and asked Mrs. Quirk to offer grace. Then Dr. Matthews was called upon to give the address of welcome to visitors on behalf of the local profession. Following the indulgence of the good eats, Dr. Fred J. Mayer, the only out of parish honorary member of the Avoyelles Society was called upon to deliver a Memorial of the Society and a Eulogy to its members.

AUXILIARY NEWS.

The Woman's Auxiliary of the Louisiana State Medical Society held its first regular session on the morning of April 29. In the absence of the President, Mrs. Oscar Dowling, the First Vive-President, Mrs. Arthur A. Herold, presided.

As this was the first executive session held following the State Auxiliary's organization a contitution was read and adopted. The Secretary read the President's report which was well received. Reports were read and filed of the work done by the New Orleans Auxiliary and the Shreveport Auxiliary. Those attending the Southern Medical meeting in Miami and the American Medical in Portland gave short reports of the work of the auxiliaries of these two organizations.

The auxiliary was honored by having as its guests two distinguished workers, Mrs. John O. McReynolds of Dallas and Mrs. S. A. Collom of Texarkana. Mrs. McReynolds has been President of the National Auxiliary. It was due to her efforts that the first auxiliary was formed. Mrs. McReynolds is a charming speaker and an earnest worker and she gave a most encouraging and interesting talk on auxiliary work which was enjoyed and appreciated by all. Mrs. Collom, who is President-Elect of the Southern Medical Auxiliary, is "the mother" of our local auxiliary. She organized us during a Tri-State meeting which was held in Shreveport. Mrs. Collom explained the endowment fund for indigent physicians that the Southern Medical Auxiliary is sponsoring and asked the endorsement of the Louisiana State Auxiliary. The endorsement was given unanimously. The fund will be discussed in detail in Louisville during the Southern Medical meeting.

At present the State Auxiliary has only two parish organizations but we hope at our next meeting in New Orleans in 1931 to report many more parishes organized. Texas is a 100 per cent state, that is, wherever there is a Medical Society for the doctors the wives have an Auxiliary. We expect the doctors of Louisiana to give us so much support and encouragement that we shall soon be able to add the fair name of Louisiana to the list of 100 per cent organized states.

The Auxiliary went into executive session again Wednesday morning and after finishing the necessary business the following officers were elected and installed: Mrs. A. A. Herold, President; Mrs. H. W. E. Walther, President-elect; Mrs. S. C. Jamison, Vice-President; Mrs. J. L. Scales, Vice-President; Mrs. L. J. Williams, Vice-President; Mrs. J. A. White, Vice-President; Mrs. W. S. Kerlin, Treasurer; Mrs. R. B. Harrison, Recording Secretary; Mrs. R. T. Douglas, Corresponding Secretary.

MRS. ARTHUR A. HEROLD, Pres.

NATIONAL WOMEN'S AUXILIARY MEETING OF THE AMERICAN MEDICAL ASSOCIATION IN DETROIT, MICHIGAN.

The Eighth Annual Session of the Women's Auxiliary to the American Medical Association was formally opened in Detroit Tuesday, June 24. There was a pre-convention board meeting Monday afternoon. At the meeting Tuesday morning Mrs. Z. S. Whitney, president of the Wayne County Auxiliary, the hostess auxiliary, gave an address of welcome, which was graciously and cleverly responded to by Mrs. J. O. McReynolds, past president of the National Auxiliary. Mrs. T. H. Hoxie of Kansas City, president, presided. There was also a general meeting held Wednesday morning and a post-convention board meeting Thursday morning. Mrs. J. W. Hunsberger of Norristown, Pa., the new president, presided. The Detroit doctors and their wives were charming hosts and hostesses and there were many delightful social functions that were enjoyed by all of the visitors.

The Detroit meetings were well and enthusiastically attended. There were present during the meeting seventy-nine delegates, twenty alternates, seventy-eight guests, and one hundred and eighty-seven members, besides the officers, chairmen of standing committees and all state presidents.

The states are allowed one delegate for every 100 members in good standing. There were women at the meetings from practically every one of the 37 states that have organizations. One outstanding fact was that several women came to Detroit from great distances to attend the auxiliary meetings despite the fact that their husbands were unable to accompany them.

The National Auxiliary now has 12,100 members listed in 37 states. We want more members from these states and we want more states organized, but we are proud that in the eight years have accomplished as much as we have. We feel that having survived there first years we have made for ourselves a definite place in constructive health work.

On Tuesday, after the morning session, we held our auxiliary luncheon. Mrs. Walter Jackson Freeman, president of the Pennsylvania Auxiliary, and daughter of Doctor W. W. Keen, the famous surgeon, acted as toastmistress.

Dr. M. S. Harris, president, and Dr. W. G. Morgan, president-elect of The American Medical Association, and Dr. J. H. J. Uphan, chairman of Advisory Council to the National Auxiliary, and Dr. Charles H. Mayo gave interesting short talks which were enjoyed and appreciated by the ladies.

The wonderful progress that has been made by the National Auxiliary is due to the keen spirit of cooperation and hearty support that have been rendered by the members of the American Medical Association.

Next year the Women's Auxiliary to the American Medical Association will be given space in "The Bulletin," issued monthly by the American Medical Association and the names of the members of the National Auxiliary will be added to the mailing list.

The aims of the National Auxiliary are: self-education, education of the public concerning health questions, the arrangement of social and benevolent programs to be made according to the individual needs of the states.

The following officers were elected and installed at Detroit:

President, Mrs. J. N. Hunsberger, Norristown, Pa.

President-elect, Mrs. A. B. McGlothlan, St. Joseph, Mo.

Vice-President—

Mrs. Southgate Leigh, Norfolk, Va.

Mrs. James Blake, Hopkins, Minn.

Mrs. C. W. Garrison, Little Rock, Ark.

Mrs. J. F. Percy, Los Angeles, Calif.

Recording Secretary, Mrs. A. T. McCormick, Louisville, Ky.

Treasurer, Mrs. F. L. Adair, Chicago, Ill.

MRS. ARTHUR A. HEROLD.

Dr. Lucien LeDoux of the staff of the Hotel Dieu, New Orleans, was a guest of the Seventh District Medical Society at its last meeting in Opelousas and read a paper on "Some Functional Disturbance of the Ovaries."

At the recent meeting of the American Association for the Study of Goiter at Seattle, Washington, Doctor William F. Rienhoff, Jr., of Johns Hopkins University, Baltimore, Maryland, received the annual award of $300 for the best essay dealing with the goiter problem. Doctors O. P. Kimball, of Cleveland, Ohio, and E. P. and D. R. McCullagh, Cleveland Clinic Foundation, Cleveland, Ohio, and Robert P. Ball, of the University of Louisville, received honorable mention.

UNITED STATES PUBLIC HEALTH SERVICE.

Asst. Surgeon J. O. Dean, relieved from duty at New Orleans, La., and assigned to duty at Ellis Island, N. Y., July 11, 1930.

A. A. Surgeon C. C. Applewhite, directed to proceed from Jackson, Miss., to New Orleans, La., and return, for conference regarding rural sanitation on Aug. 11. Aug. 1, 1930.

Medical Director John McMullen, relieved from duty at New Orleans, La., about Aug. 18, and assigned to duty in Paris, France, in charge of service activities in Europe. Aug. 4, 1930.

A. A. Surgeon R. E. Bodet, directed to proceed from Mobile, Ala., to New Orleans, La., and return, for conference Aug. 11. Aug. 5, 1930.

The Bi-Parish Medical Society met in East Louisiana State Hospital as guest of Dr. Glen J. Smith and staff, June 4, 1930.

Interesting and instructive papers were read by Drs. Tom Spec Jones and C. A. Weis of Baton Rouge.

The usual banquet followed in the hospital.

GLEN J. SMITH, Pres.
S. L. SHAW, Sec'ty. pro-tem.

The Bi-Parish Medical Society met in East Louisiana State Hospital, August 6, 1930.

An interesting clinical case was presented by Dr. E. W. Toler of Clinton, and an instructive paper was read by Dr. E. M. Robards of Jackson.

Drs. E. M. Levert of St. Francisville, E. M. Robards of Jackson, W. E. Wilkinson of Jackson, and C. S. Toler of Clinton were elected as members of our society.

An elegant banquet followed with Dr. Glen J. Smith and staff.

GLEN J. SMITH, Pres.
E. W. TOLER, Sec'ty.

GARVIN CANCER RESEARCH LABORATORY
To My Colleagues, the Editors of the Medical Journals of the United States and Canada:

If you receive this in time and it is appropriate, will you publish in your journal that there will be a meeting in the ballroom of Belvedere Hotel in Baltimore, Maryland, Monday, Tuesday and Wednesday, September 15, 16 and 17, 1930, beginning Monday morning at ten o'clock and ending Wednesday evening at nine o'clock, daylight saving time. During these days there will be lantern-slide demonstrations, with four lanterns and screens, on the Diagnosis and Treatment of Diseases and Tumors of Bone.

The first day will be devoted to the fundamental and essential knowledge of the benign and malignant lesions of bone, such as osteitis fibrosa, giant-cell tumors, osteomyelitis, sarcoma and so forth. On the second day, the subject will be the different diseases of single bones, such as the lower end of the radius, vertebrae, etc. The third day will be reserved for the presentation of rare lesions of bone difficult to diagnose. Any member of the medical profession attending this meeting may register such a case by addressing Miss Maude Walker, Secretary to Dr. Bloodgood, Surgical Pathological Laboratory, Johns Hopkins Hospital, Baltimore, Md., enclosing the X-ray films or lantern slides of them (if possible the latter) and sections of tissue, if any. Any member of the medical profession interested in the diagnosis and treatment of lesions of bone is invited.

On account of the size of the ballroom the number must be limited to 800.

Those who wish to attend should write the Belvedere Hotel and register, either requesting the usual rates for a single or double room, with and without bath, or the special rates for three or more in a room with and without bath, and the special restaurant rates for a club breakfast, luncheon and dinner. You are advised to bring the answer received from the manager of the Belvedere Hotel with you and present it when you register. For any further details in regard to this demonstration, address your letter to Miss Maude Walker, named above.

I am very anxious that this invitation should reach radiologists, surgeons, pathologists, and internists who are interested in the subject but have only rare opportunities to observe lesions of bone. In three sessions of two or two and one-half hours each, on three days, with four lanterns and a very remarkable and educational motion picture, the subject can be presented in an almost unforgettable way, emphasizing the essentials and fundamentals in the diagnosis and treatment of bone lesions. All cases registered for presentation on Wednesday, will be sent later to Dr. Bowman C. Crowell, Director of Clinical Research of the American College of Surgeons, who is Chairman of the Bone Sarcoma Committee. You should become familiar with this registration of sarcoma of bone, if you are not, because you can register all your cases there and receive the diagnosis of a committee, and you can send for groups of bone tumor cases which have been registered, for personal study.

It is impossible except in the largest clinics, for any radiologist, pathologist, surgeon, or internist, to become familiar with the changing clinical, X-ray and microscopic pictures of diseases and tumors of bone as they come under observation earlier and earlier after the first injury or first symptom, and to learn how to diagnose and treat them in the best way.

Sincerely yours,

JOSEPH C. BLOODGOOD.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

L. S. Lippincott, Editor

H. L. Rush, Associate Editor *D. W. Jones, Associate Editor*

FROM OUR PRESIDENT.

MEMBERSHIP.

One of the most healthy indications we have is the failure of the prediction, so freely made last year, that the increase in dues which went into effect January 1, would cause a material loss of membership. To date, that loss is only 22.

This is unquestionably due in a great measure to the unusual and efficient work done last year by Dr. Gamble in awakening interest in the various component Societies. Few presidents have been so active and the results are very evident and very gratifying.

It would appear that, since conditions are so satisfactory in this regard within the organization, the next move should be in the direction of increasing the membership. Very few of the component Societies are coming up to requirements in this respect—at least, very few of them are "delivering the goods."

When we organized in 1903, we stated as our purpose the organization of "the entire profession of the State." Our membership was then about three hundred and we practically doubled it within the year. We continued to grow, with the usual annual fluctuations and the check due to a fifty per cent increase in dues in 1911, until in 1913 we had a membership of 1040. This figure has never been materially exceeded and we have frequently dropped below 1,000, this last figure being our approximate average.

Apparently one reason we have stood still for seventeen years is because we are of such comfortable dimensions that we have grown lazy and, perhaps, a bit conceited. Some of the fat has gotten into our eyes, so that we can no longer see clearly the legend on the flag we are still flying at the masthead. The words "every doctor a member" are still there, but we have forgotten about them. The idea begins to be bruited about that we need take no action regarding non-members; that they should come to us. In fact, it is frankly said by some of the very men who are chiefly in charge of the work of organization, that the fellows who do not voluntarily come into the Association are not worth consideration. This attitude is diametrically opposed to our avowed purpose and is absolutely untenable. We should convert the non-member for the sake of the benefit to him, not to us.

Such a course isn't entirely altruistic because there is a benefit to us in the end. Organized medicine is not judged by the standard of its supporters, but of that of the profession as a whole. The public cannot differentiate between members and non-members and, so far as the layman is concerned, the faults and failures of the latter affect us as if they were our own and we cannot cure them in non-members.

Briefly stated, the purpose of the Association is, first of all, a society in every county and every doctor a member. This has been accomplished in some localities, but it is far from being the case throughout the state. There are approximately 1,450 eligible physicians in the state and slightly less than 1,000 are members. A tabulation made August 1st, shows this distribution:

Society—	Eligible	Per cent Members
Pike	26	100
DeSoto	15	100
Tate	12	91
Jackson	10	80
East Mississippi Four	101	78
Issaquena-Sharkey-Warren	53	77
Harrison-Stone-Hancock	64	76
Northeast Mississippi Thirteen	225	71
Tri-County	52	66
Delta	173	66
Clarksdale and Six	93	65
Homochitto	52	63
Central and Scott	169	63
South Mississippi	166	62
North Mississippi Six and Panola	92	61
Winona District	85	61
Kemper	10	60
Clark-Wayne	22	59
Leake	17	59
Claiborne	8	50
Total for State	1445	68

These figures are not entirely representative of conditions since some are not included who are entirely eligible in the ordinary meaning of the word—men who have abandoned or retired from practice. There are quite a few of these.

For the purpose of society comparison, Scott County has been bracketed with Central Society and Panola with North Mississippi Six. These societies have absorbed the membership of the old Scott and Panola Societies and it seems only fair that they should assume the liabilities along with the assets.

Attala and Holmes have been included in the Winona District Society, of which they are now parts.

The last four on the list are skeleton societies, rarely, if ever, having a meeting, and holding on simply to keep membership in the State Association.

If we learn anything from them at all, these figures show us that the larger societies, composed of groups of counties, should pay more attention to the matter of membership. The seven single county Societies have an average membership of 81 per cent of all eligibles; the larger, group-county organizations only 66 per cent. The difference is too great not to be significant and I believe the trouble is because these societies are continuing to operate with the same machinery, originally planned for the single-county Society, and it isn't strong enough to pull the load.

The County Secretary is the life of the Society. The meetings, the programs and, in a great degree, the membership, depend on him. But one man can do only just so much work. He can handle one or two counties very well, but when the territory gets too large, and the number of eligible physicians too great, the results are not so good. As an example of this, note the conditions in the third Councilor district. In 1924 there were two Societies, the Northeast Mississippi Eleven and the Alcorn-Tishomingo. The latter numbered on its roll of members every eligible physician in the two counties. One hundred per cent. Two years later these two societies combined to form the Northeast Mississippi Thirteen. Today in Alcorn and Tishomingo only 72 per cent of eligibles are on the roll. Take the reverse of this. When it was part of the old and reliable Tri-County Society, Pike County showed only about 75 per cent of eligibles. Two years ago it got a divorce and went "on its own." Today it registers 100 per cent.

It is also noticeable that frequently, in group Societies, the percentage of membership runs highest in the county in which the Secretary lives. Take the case of East Mississippi Four. Lauderdale has 91 per cent membership. The next on the list is only 76. Simply the greater opportunity for personal contact. One man can do only so much.

It is, therefore, suggested that we bring other influences to bear and since it is already available, use existing machinery, simply putting it to different uses.

Why not assign to the County Vice-Presidents, one in each County, the work of getting in members? They can make the necessary personal contact. If we want to show our sporting instinct, make a contest of it. Set a definite date for its conclusion, say the Annual Meeting for election of officers in December, and put up a prize for the Vice-President whose county makes the greatest proportionate increase. This prize might well be the Presidency of the Society for the next year.

The East Mississippi Four County Society, at its meeting July 30th, voted to put this plan in operation, and the Vice-President from Lauderdale remarked with a cheerful grin: "Watch Lauderdale go to 100 per cent."

E. F. HOWARD, M. D.

EAST MISSISSIPPI STATE HOSPITAL.

"We have been very fortunate during the past month to have several of our neighboring doctors visit us. Dr. M. H. McRae, Corinth, Dr. W. A. Land, DeKalb, and Dr. Dan McLead, McLain, paid us the honor of a visit while attending business in Meridian. We cannot express our appreciation of these calls with the degree of pleasure which we actually experience. The East Mississippi State Hospital is a State institution which should hold some interest of vital importance to every physician in the State. I'll venture to say that not five per cent of the physicians in East Mississippi have ever set foot inside the institution and know but very little of the nature and extent of our work. We not only invite you but urge you and implore you to make a special effort to visit us in the near future.

"Dr. M. J. L. Hoye attended the meeting of the East Mississippi Medical Association at Lake, Mississippi. It was stated that the heat was intense but we are not so sure whether the heat of oratory from political aspirants or the sun proved the more uncomfortable.

"We are glad to report some very satisfactory results in the treatment of our paretics with typhoid vaccine given intravenously as a method of producing periodical hyperpyrexia. We feel that this method has a distinct advantage over malaria in several respects, particularly in avoiding the necessity of introducing an infection which of itself is somewhat dangerous, both to the patient and to the immediate community. There has been definite improvement in almost 60 per cent of our cases and approximately 40 per cent show every evidence of becoming complete cures. Ten years ago no paretic was expected to live more than two years.

"The 'epdiemic' of 'Jake Paralysis' evidently is at an end. At least very few cases have been reported within the past month. Considerable literature is being compiled gradually but the exact cause and the ultimate recovery of these patients remains vague still. The U. S. Public Health report issued July 25, 1930, regards the chemical evidence at hand after examing several samples, as indicating that a phenolic compound found present in all poison samples and entirely absent in non-toxic samples must be responsible although the re-

sults obtained in experimenting with various animals does not give uniform results.

"Post mortem evidence shows clearly that the paralysis is due to a peripheral neuritis and that the spinal cord and brain are not affected. With these findings it seems reasonable to assume that regeneration of these peripheral nerves will take place and the paralysis will eventually become cured. The serious danger lies in the possibility of contractures which may leave permanent deformities unless properly treated."

C. ROLAND BENNETT, M. D.

CLARKSDALE AND SIX COUNTIES MEDICAL SOCIETY.

Dr. D. V. Galloway, Secretary, reports that the Clarksdale and Six Counties Medical Society held a most delightful fish fry on Moon Lake, June 19. This is an annual event in which the members of the Society entertain in honor of the ladies of the Auxiliary. Forty-five were present, including the doctors, their wives and guests. Entertainment aside from the renewal of old acquaintances and the making of new ones, included fishing and boating. Several of the doctors caught nice strings of bream, white perch, and gray bass, the best strings of the day being caught by Drs. J. C. Culley, S. D. Robinson and E. LeR. Wilkins. A dinner of fish and fried chicken was served at nine o'clock and was enjoyed by everyone.

Dr. A. J. Brown proved a very entertaining toastmaster, and the principal guest speaker of the evening was Dr. J. C. Culley, President-elect of the Mississippi State Medical Association. Dr. Culley mentioned as one of his projects, when he should enter the President's chair, a state-wide physicians business and collection bureau. He pointed out how necessary this service was becoming to physicians, and stated he believed the doctors were capable in Mississippi of organizing their own service. Dr. L. B. Austin, Rosedale, President of the Society, made an interesting talk.

For the Auxiliary talks were made by Mrs. H. L. Cockerham, Gunnison, District Councilor of the Women's Auxiliary of the Mississippi State Medical Association, Mrs. J. W. Gray, Clarksdale, Mrs. D. H. Raney, Mattson, and Mrs. J. P. Walker, Lambert, President, Vice-President, and Secretary, respectively, of the Women's Auxiliary of the Clarksdale and Six Counties Medical Society.

A report was submitted by the Committee on a Physicians' Bureau for the Society. This outlined a plan to organize this bureau as a division of the Merchants' Credit Association of Clarksdale, under the direction of the Secretary of that organization and using the same offices and files. The physicians' bureau, however, is to be separate and under the final authority of a board of directors of physicians. The annual dues of the physicians' bureau are to be $50.00 and will be paid in quarterly installments. A collection agency is to be established and commissions on the collections are expected to eventually reduce the membership fee, or to take care of it entirely. The Secretary of the physicians' bureau is to be the same as the secretary of the Merchants' Credit Association of Clarksdale, a very capable and efficient man, Mr. Adrian Boyd. The bureau was unanimously endorsed and accepted by the Society and plans made to put it into operation about July 1st.

The committee that worked out the plan for the Physicians' Business Bureau consisted of Drs. A. J. Brown, Chairman; L. B. Austin, S. D. Robinson, and T. G. Hughes, Secretary.

NORTHEAST MISSISSIPPI MEDICAL SOCIETY.

At the Congress of the American Medical Editor's and Author's Association in Detroit on June 24, Doctor William H. Anderson, Booneville, made the report for the Committee on Hospitals. Dr. Anderson is chairman of that committee.

Dr. E. D. Burns, Ecru, recently spent several weeks in Nashville, Tennessee, in post-graduate work at Vanderbilt University.

Dr. William Milton Adams has recently located in Booneville and is connected with the Anderson Clinic. Dr. Adams is the son of Dr. R. M. Adams, Ripley, and a graduate of Tulane University. It is interesting to note that, in addition to his father, Dr. Adams' grand-father, great-grand-father and two uncles have been prominent and successful practitioners in Tippah County for many years.

GREENVILLE.

Dr. T. B. Lewis, Greenville, furnishes the following:

Dr. R. E. Wilson attended the pediatric seminar at Saduca, N. C. He was away for two weeks.

Dr. T. B. Lewis and family attended the national Kiwanis convention at Atlantic City the first week of July. They visited other interesting points in the East while away.

Dr. Paul Gamble and wife spent the month of July in Cuba and the Canal Zone.

Drs. Gamble Brothers and Company are completing their new clinic and expected to move in about August 1.

The Greenville 100-bed King's Daughters hospital is a very busy place. Only a very few vacant beds can be found at any time. The regular staff meetings at the hospital are very interesting and well attended.

DEATHS OF PHYSICIANS.

Elwood Park Sneed, Lafayette Springs, Miss.; Memphis Medical College, 1906; aged 48; died, in June.

Heard Hopper West, Gulfport, Miss.; Memphis Hospital Medical College, 1903; health officer; members of staff of King's Daughters' Hospital; member Harrison-Stone-Hancock Medical Society, Mississippi State Medical Association; Fellow of American Medical Association; aged 56; died, July 5, of angina pectoris and encephalitis.

John Franklin Aycock, Calhoun City, Miss.; Memphis Hospital Medical College, 1913; member Northeast Mississippi Thirteen Counties Medical Society, Mississippi State Medical Association, American Medical Association; aged 43; died, May 16.

William Cheney Watts, Drew, Miss.; University of the South Medical Department, Sewanee, 1896; aged 56; died, July 30, of malta fever.

Osborn Moore Turner, Jackson, Miss.; Tulane University of Louisiana School of Medicine, 1892; age, 61; died, July 29.

Jenner Harvey McNeil, Olive Branch, Miss.; Memphis Hospital Medical College, 1905; aged 47; died, in May.

Joseph Creath Armstrong, Jackson, Miss.; Vanderbilt University School of Medicine (Nashville), 1893; member Central Medical Society, Mississippi State Medical Association, American Medical Association; aged 57.

Hillard McMullan, Newton, Miss.; Memphis Hospital Medical College, 1902; member East Mississippi Medical Society, Mississippi State Medical Association, Fellow American Medical Association; aged 53; died, July 12.

Edward L. Gilbert, Electric Mills, Miss.; Memphis Hospital Medical College, 1902; surgeon-in-charge George Hixon Memorial Hospital; member Mississippi State Medical Association; Fellow American Medical Association; aged 55; died, August 13.

M. Emmet Britt, Como, Miss.; University of Louisville School of Medicine, 1882; aged 76; died, July 22.

HILLARD McMULLAN, M. D., JULY 12, 1930.

Whereas, it has pleased Almighty God to call from our midst, our beloved brother and friend, Dr. Hillard McMullan, who was a member of the East Mississippi Medical Society.

We are grieved at his going, and we feel keenly the loss of a friend and brother. Dr. McMullan was a true friend to humanity; his life was given in the service of his fellowman. He was a tireless worker and knew not when to stop or let up for his own personal benefit.

He was born in Newton County, near Decatur, Miss., August 25, 1877. The doctor was a twin brother of Dillard McMullan, who now resides at Lake, Miss. He was also a brother of D. V. McMullan, druggist of Newton, Miss., who had been associated with the doctor for a number of years in a business way; and he had several other brothers who now reside in Smith and Newton Counties. He married Miss Mattie Huff of Sylvarena, Miss., Dec. 12, 1897, and she also survives him.

Dr. McMullan as a boy attended the public schools of Newton County, and availed himself of every opportunity within his reach at that time; he afterwards entered Memphis Medical College and graduated therefrom in 1902. He entered actively in his profession in Smith County immediately after graduating. During the twenty-eight years of his practice he has croweded in as much hard work, and covered as much ground as the average practitioner would be able to do in fifty years. He had the drive and push of men who really do things. He was also a successful business man.

Dr. McMullan moved to Newton, in 1921, and in 1927, he and Dr. M. L. Flynt purchased the Newton Infirmary, and since that time he has done the principal part of the laboratory work; he was a wonderful diagnostician, and he was never satisfied to give up a case until he had found the trouble.

Dr. McMullan was a Mason, a member of the Methodist Church; he was also a member of the Southern and American Medical Associations. He had done post-graduate work in New Orleans, and Little Rock, and in the Mayo Clinic at Rochester, Minn.

The community has lost one f its most valuable citizens, the medical profession one of its ablest members, and his fellowmen a real and true friend and brother.

We extend to his family and relatives our heartfelt sympathy.

Therefore, be it resolved. That this resolution be spread upon the minutes of our society, a copy hereof sent to the family, and a copy sent to the press.

Respectfully submitted,

I. W. COOPER
M. L. FLYNT,
DUDLEY STENNIS,
Resolutions Committee,
East Mississippi Four Counties Medical Society.

EAST MISSISSIPPI FOUR COUNTIES MEDICAL SOCIETY.

"I am herewith enclosing you a copy of Resolutions relative to the death of Dr. H. McMullan of Newton, Mississippi.

"These Resolutions give an accurate account of his life and activities, and I think that this will be all that will be needed.

"I have just learned that Dr. E. L. Gilbert of Electric Mills died last night. He was surgeon in charge of the hospital at that place and was a very valuable man in his community.

"It seems that doctors in the State are certainly being hard hit with heart conditions. Too much hard work and too much worry is the cause. They never take time to relax but keep on the job all the time and iron will wear out after a time.

"It is with the keenest personal regret that the death of Mrs. Julian T. Bailey, wife of Dr. Julian T. Bailey is reported. Mrs. Bailey died August 10, 1930, and was buried the following day. Mrs. Bailey was a devout Christian, a devoted wife and mother, and in fact was an embodiment of all that goes to make up true womanhood. Our hearts go out to Dr. Bailey and their little daughter, Rebecca, in their terrible bereavement.

"Dr. S. H. Hairston is still confined to his bed as a result of a heart attack which he had about five months ago. We are hopeful that he will soon be better and that he willl be able to enter again actively in his work.

"Dr. T. G. Cleveland, one of our very active practitioners, is taking a very much needed rest and vacation. He has been under the weather some several weeks.

"Dr. and Mrs. H. L. Rush and son have just returned from the Mississippi Coast, where they spent a very enjoyable vacation.

"We were mighty glad to see you, Howard, Jones, and Underwood, at our meeting at the Patrons' Union in July and hope it will not be long before you will be back with us."

I. W. COOPER, M. D.

Dr. Robert Heath Foster, Laurel, has announced that he has now arranged to devote his entire time to private practice. Dr. Foster has for six years been chief surgeon at the South Mississippi Charity Hospital.

A CORRECTION.

"Will you please say in the next issue of the Journal that through an error in the office of the agent of the group insurance companies with which we have insurance that the statement was sent out that Dr. J. O. Ringold of Winona had been paid $3,000.00 for total permanent disability, and that this in an error, and that Dr. Ringold is in his usual good health. This has been embarrassing to Dr. Ringold and I regret exceedingly that this error got into print, but I was relying wholly upon the records of the insurance company."

T. M. DYE, Secretary,
Mississippi State Medical Association.
August 11, 1930.

The Sharkey County Health Unit held a tonsil and adenoid clinic July 22, at Dr. W. C. Pool's hospital, Cary.

Dr. and Mrs. H. S. Goodman, Cary, are in Virginia for a two weeks' vacation, where they will be joined by their daughter, Miss Ethel.

PIKE COUNTY MEDICAL SOCIETY.

Dr. I. E. Stennis, Secretary, reports that the regular monthly meeting of the Pike County Medical Society was held in the Palm Room, McColgan Hotel, August 7. Fifteen doctors were present and Drs. E. L. Irwin, New Orleans, and C. D. Overton, Hammond, La., were guests. Dr. C. W Stewart, Gillsburg, was elected a member of the Society.

The scientific program included the following:

Quinine Amaurosis.—Dr. W. M. Biggs. Discussed by Dr. T. E. Hewitt, and others.

Non-Diabetic Acidosis.—Dr. E. L. Irwin. Discussed by Drs. W. M. Biggs, L. J. Rutlege, E. M. Givens, L. D. Dickerson and others.

"Dr. L. D. Dickerson and Mrs. Dickerson, McComb, spent the last week of July and the first week of August on the Mississippi Coast and at Mobile, Alabama. They report a very pleasant vacation.

"We are having some awful dry and hot weather, and the people, especially doctors, are still cussing the special tax on cigars and cigarettes."

TREATMENT OF SYPHILIS.

Dr. H. C. Ricks, A. A. Surgeon, U. S. P. H. S., has sent out from offices of the State Board of Health a number of suggestions quoted from an article by Dr. John H. Stokes, on the treatment of syphilis. Dr. Ricks states that there is available a bulletin written by a committee of experts for the United States Public Health Service, the title of which is "The Management of Syphilis in General Practice." This bulletin takes up the administration and advantages or disadvantages of various drugs used in the treatment of syphilis,

as well as various complications that sometimes occur. Copies of this bulletin may be had from the Bureau of Communicable Diseases, State Board of Health, Jackson.

MALARIA CONTROL.

Dr. Mark F. Boyd, Director, Bureau of Malaria Control, Mississippi State Board of Health, writes:

"Recent allegations to the effect that malaria incidence is diminished in the vicinity of alfalfa fields will be investigated in Mississippi by Dr. Stratman-Thomas, of the field staff of the International Health Division of the Rockefeller Foundation, co-operating with the Bureau of Malaria Control of the Mississippi State Board of Health. Dr. Thomas will make a number of surveys to determine the incidence of malaria among those who live in close proximity to alfalfa fields, as well as control surveys among those who live at a greater distance, to determine if any difference is detectable."

TUBERCULOSIS.

Professor Joseph D. Aronson, of the staff of the Phipps' Institute is to study tuberculosis in Mississippi in co-operation with the bureau of communicable diseases of the State Board of Haelth.

McCOMB.

"Dr. and Mrs. I. E. Stennis, McComb, enjoyed a two-weeks vacation in North Mississippi during July. Most of their time was spent in Meridian, DeKalb and Macon.

"Dr. and Mrs. R. H. Brumfield, McComb, are still receiving congratulations on the arrival of the fine son that came into the family April 28. The young man is named Bob White, Bob, for his father, White for his grandfather. Usually when a boy grows to be big enough to play with the other boys in the community, some boy will nick-name him. Some of the many friends of Dr. and Mrs. Brumfield are wondering when that time arrives whether it will be 'Quail' or 'Partridge'."

Dr. Cooper take notice.

HONOR ROLL.

The enrolled membership of the Pike County Medical Society represents 100 per cent of the practicing physicians of Pike County and the average monthly attendance at meetings is about 75 per cent of the membership roll.

WOMEN'S AUXILIARY.

FROM THE PRESIDENT.

"Yours of July 25—I hope each officer of Auxiliary has received one of your letters urging them to turn in news.

"I am sure you are right about putting auxiliary news before the State members, and I believe it will help us to increase membership and promote our affairs. I have urged every officer to send in news items to our publicity chairman, Mrs. Henry Boswell, who in turn, will send to you. We are late in beginning our work for the year account of my absence. Mrs. D. J. Williams of Gulfport and myself have just returned from a motor trip lasting a month, attending A. M. A., Detroit, then into Ontario, Toronto and Quebec, back through Niagara Falls, Atlantic City, New York, Washington, etc., a most wonderful trip, 4,000 miles, without a mishap, even a puncture.

"I am writing again to our officers and am planning a membership campaign and willl include news items in letters to members.

"Would it be in order for you as editor to urge each doctor's wife to join auxiliary? We have only 96 listed auxiliary members and 63 paid up members. I am so anxious to at least increase our membership and where possible organize."

MRS. L. L. POLK.

From Mrs. D. J. Williams, Gulfport:

The Harrison-Stone-Hancock Counties Medical Auxiliary plans to hold a fish fry on Cat Island in August when the husbands of the members and the student nurses of the hospitals in Gulfport and Biloxi will be special guests.

"Dr. Margaret Caraway, Gulfport, spent a week in Shreveport visiting her son, Archibald Caraway, who is employed as a swimming teacher at a resort near Shreveport. Young Caraway is a medical student at Tulane.

"Dr. Emma Gay, Gulfport, is spending two weeks in the Blue Ridge Mountains, having motored up with three other women friends.

"The officers of the Auxiliary of the Harrison-Stone-Hancock Counties Medical Society for the term, 1930-31, elected at the June meeting, are as follows: Mrs. E. C. Parker, President; Mrs. J. S. Laird, Vice-President; Mrs. George Sims, Recording Secretary; Mrs. M. M. Snelling, Treasurer; Dr. M. Caraway, Parliamentarian.

"Ten dollars was given to the Preventorium Fund sponsored by the State Medical Auxiliary by the Medical Auxiliary of the Harrison-Stone-Han-

cock Counties at the June meeting. Mrs. D. J. Williams, Gulfport, has been appointed to serve as chairman of this fund and is formulating plans for fall activities."

From Mrs. B. Z. Welch, Biloxi:

"In regard to your letter of July 25, concerning our Auxiliary, our organization is known as the Biloxi Unit of the Harrison County Auxiliary. We have eight members. Recently some of our members pledged themselves to raise money for the hospital. We raised $55.00 by means of a rummage sale and other devices.

"Our Club meets once a month at the homes of the members, taken alphabetically. After our business session is over we always have a social hour at which time we become better acquainted and in general we enjoy ourselves to a great extent."

EAST MISSISSIPPI MEDICAL SOCIETY.

Twenty-eight physicians attended the meeting of the East Mississippi Medical Society held at Patron's Union Camp Ground, Lake, Wednesday, July 30. Dr. H. S. Gully, Meridian, President, presided. The principal address was made by Dr. E. F. Howard, Vicksburg, President of the Mississippi State Medical Association, who outlined the plans of the Association for the present year and urged that the purpose of the Association "to federate and bring into one compact organization the entire medical profession of the state of Mississippi, "as stated in the constitution, but put into effect in fact. Talks endorsing the plans outlined by Dr. Howard, were made by Drs. F. J. Underwood, Jackson, Executive Officer of the Mississippi State Board of Health; D. W. Jones, Jackson, Councilor; L. S. Lippincott, Vicksburg, Editor; I. W. Cooper, Meridian, Treasurer of the Mississippi State Medical Association; M. J. L. Hoye, Meridian, Vice-President, Mississippi State Medical Association; and several others.

It was agreed to recommend that the physicians of Scott County become members of the Central Medical Society. Dr. William W. Parker, Louisville, was elected Vice-President of the society from Winston County. Drs. Crit Pharris, Louisville, and Eva E. Strahan, Meridian were unanimously elected to membership.

The scientific program, "Practical Points in Suturing," Dr. J. Hack Rush, Meridian and "Diagnosis and Treatment of Syphilis," Dr. T. L. Bennett, Meridian, was postponed until the next meeting.

At the conclusion of the meeting the members of the society and guests were served refreshments by Dr. I. W. Cooper and his good sister.

Dr. Eva E. Strahan has recently located in Meridian, doing general practice, with offices in the Marks-Rothenberg Building. Dr. Strahan is a graduate of Tulane University School of Medicine in the class of 1928, and served her internship in the Baptist Hospital, New Orleans.

Dr. Crit Pharris has recently located in Louisville and is associated with Dr. W. W. Parkes. Dr. Pharris is a graduate of the University of Tennessee and served his internship in St. Joseph Hospital, Memphis.

GROUP INSURANCE.

Dr. T. M. Dye, Secretary, Mississippi State Medical Association, has sent out the following letter in regard to the group insurance plan adopted by the Association:

"My Dear Doctor:

"The following claims have been paid by the insurance companies to members of our Association since the adoption of the group insurance plan two years ago. In addition there are now pending several claims for permanent disability, most of which will be paid, and one or two death claims which are going through the regular channels and will be paid.

R. P. Crump	$3,000.00
J. S. Gibson	3,000.00
W. S. Hamilton	3,000.00
W. W. Davis	3,000.00
R. T. Stapleton	3,000.00
David Walley	3,000.00
N. L. Nash	3,000.00
J. F. Aycock	3,000.00
O. F. Parkes	3,000.00
E. H. Copeland	3,000.00
E. R. Gordon	6,000.00
J. C. Armstrong	6,000.00
Total	$45,000.00

"These claims have all been paid promptly upon the completion of the proof of death or of

permanent disability. In no instance has there been any unnecessary delay. Most of the claims have been paid in advance of most other insurance.

"Truly your friend,

T. M. DYE, Secretary."

NORTH MISSISSIPPI SIX COUNTY MEDICAL SOCIETY.

A meeting of the North Mississippi Six County Medical Society was held at Water Valley, July 16. The program, as reported by Dr. A. H. Little, Secretary, was as follows:

1. Hematemesis, Report of a Case.—Dr. F. E. Linder, Oxford.

   Discussion opened by Drs. George Brown and R. J. Criss.

2. Sodium Amytal as an Anaesthetic and Hypnotic.—Dr. C. M. Speck, New Albany.

   Discussion by Drs. J. C. Culley and S. E. Eason.

3. Evils of Too Much Milk.—Dr. Eugene Rosamond, Memphis.

   Discussion by Dr. W. C. Lester and E. L. Hooper.

4. Malaria.—Dr. G. H. Wood, Batesville.

   Discussion by Drs. B. H. Paslay and T. J. Pennebaker.

5. Cancer of the Larynx.—Dr. H. W. Qualls, Memphis.

   Discussion by Drs. B. S. Guyton and H. N. Mayes.

NATCHEZ CHARITY HOSPITAL.

Acknowledgment is made of the receipt of an attractive booklet entitled, "Nurse-O-Grams," published by the Natchez Charity Hospital and having to do especially with the training school for nurses. Dr. J. A. Rayburn is superintendent of the hospital and Mrs. Jessie W. Tyler, R. N., is superintendent of the Training School.

An interesting item of historical interest is included in the foreword. This contains information that the Natchez Charity Hospital was built in 1841, and was one of nine marine hospitals built by the United States Government. It is, therefore, one of the oldest hospitals in the country, and it was there that the State Nurse's Association was organized.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY.

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at Vicksburg on August 12. The scientific program included the following.

1. Hypertension.—Dr. S. W. Johnston. Discussed by Drs. A. Street, W. H. Scudder, G. M. Street, F. M. Smith, L. J. Clark. Dr. Johnston closed.

2. Seasonal Hay Fever.—Dr. E. H. Jones. Discussed by Drs. E. F. Howard, L. S. Lippincott, L. J. Clark, S. W. Johnston. Dr. Jones closed.

Dr. Rex Goodman, Cary and Mr. Richard Street, Vicksburg were visitors.

The next meeting of the Society will be held in Vicksburg, Tuesday, September 9. A committee in charge of program for the September meeting consists of Drs. J. V. May, Port Gibson; B. T. Orendorf, Rolling Fork; W. H. Parsons, Vicksburg; D. A. Pettit, Vicksburg; A. Street, Vicksburg.

VICKSBURG SANITARIUM.

The regular monthly Staff Meeting of the Vicksburg Sanitarium was held August 9. Special case reports presented included:

1. Ovarian Pregnancy—Demonstration of Specimen.—Dr. G. M. Street.

2. Carcinoma of the Upper Extremity of the Femur, Metastatic, With Pathological Fracture as the First Symptom.—Dr. A. Street.

3. Chronic Pyelitis With Acute Exacenbations; Uroselectan as an Aid in Diagnosis.—Dr. G. C. Jarratt.

4. Clinico-Pathological Conference—Uremia.—Drs. L. J. Clark and L. S. Lippincott.

Selected radiographic studies of the month were demonstrated as follows: Carcinoma of upper extremity of femur; Fracture of the femur, Lane plate; Fracture of the skull; Bronchial tree outlined by lipiodol; Cholelithiasis; Fistulae injected with bismuth paste.

The next meeting of the staff will take place Wednesday, Sept. 10.

BOOK REVIEWS

The Eye in General Medicine: By A. Maitland Ramsey, M. D., LL.D. New York, William Wood & Co. 1929. pp. 255.

In an exceptionally clearly and tersely written volume of some two hundred and fifty pages, one of England's greatest ophthalmologists emphasizes the importance of studying the patient as well as the disease.

To facilitate a better understanding of the subject and the book, many of the author's ideas are epigramatically phrased, and some verbatim.

The clinician must have the genius to see the whole problem, in the right proportion and properly balanced. The diagnosis is often written on the patient's face. Too much attention is paid the germ and too little to the soil in which it grows. It is more important to understand correctly the reactions taking place in the laboratory of the eye than to discover gross fundus lesions.

The capillaries are not simply tubes through which the blood passes. They are influenced by every morbid process in the body and affect the activity of every organ. The functioning and the conducting apparatus of the eye have different capillary system. Thus, increased light minimum denotes rod and cone or visual purple disease, while increased light difference suggests disease of the internal retinal layers.

Generally speaking, glaucoma is not a disease and never occurs in a perfectly healthy individual. Lagrange expresses the idea "A sick eye in a sick body." The initial stage is probably a disturbance in the capillary circulation of the ciliary vessels; a dilatation accompanied by increased permiability. The most frequent cause is probably a toxin of the histamin group which affects endocrin function and the sympathetic nervous mechanism. This toxin may be bacterial or may be produced in defective metabolism. The normal aqueous is practically neutral in reaction, that of the glaucomatous eye is distinctly alkaline. Reformed aqueous after removal materially differs from the original. Thus, following intravenous injection, arsenic is always found in the anterior chamber if previously tapped; otherwise not. It is possible that the epithelium of the ciliary processes secretes something which maintains the transparency of the vitreous and lens.

The retrobulbar injection of three minims of adrenalin which greatly improves some forms especially sub-acute and chronic glaucoma, should always be preceded by the energetic use of eserin. The intravenous injection of 50 c.c. supersaturated saline solution should be cautiously used. All glaucoma operations aim to establish a filtering cicatrix.

Bacterial infections do not necessarily cause disease; trouble arises only when the body defends itself against attack. The scientific spirit is not the exclusive property of the laboratory worker who can never replace the clinician. We must look to the living to learn the laws of life and not to the dead.

It is not enough to fit suitable glasses for the correction of refractive errors. A quick estimate must also be made of the patient's general health. A definite relation apparently exists between myopia and metabolism.

An appendix containing numerous prescriptions of local and general remedies used in ophthalmic practice follows, also a fairly complete index.

Although some of the author's ideas have not been universally adopted, they afford food for thought and deserve careful consideration. I have read this book with pleasure and profit.

CHAS. A. BAHN, M. D.

Physical and Clinical Diagnosis: By Dr. Otto Seifert and Dr. Friedrich Mueller. Translation by E. Cowles Andrus, M. D. Philadelphia, J. B. Lippincott Company. 1930. pp. 543.

The reviewer is quite enthusiastic about this small volume. In these five hundred and some odd pages there is packed a tremendous amount of important information, which is presented primarily for the student beginning the study of medicine, but which nevertheless may be satisfactorily employed as a book for quick reference and ready review by those who are further advanced in their course, or even by graduates of medicine. The work consists of description of methods of examination of the patient from the history to the more complete study of the sick man by physical methods. In addition to this section there are chapters on the blood, urinary system, gastro-intestinal tract, as well as parasitic and infectious diseases. The nervous system is briefly covered but the essentials are incorporated. The same may be said of the chapters devoted to glands of internal secretions, metabolism and diseases of the skin. The translation is thoroughly adequate and leaves nothing to be desired.

J. H. MUSSER, M. D.

Modern Otology: By Joseph Clarence Keeler, M. D., F. A. C. S. Philadelphia, F. A. Davis Company. 1930. pp. 858.

There is a personal note in this contribution, for it represents twenty-five years in the practice and teaching of otology. It does keep abreast with actual living science; real otologic science is ever moving towards greater accuracy and more efficiency. Its praiseworthy objective is not only

to save human life, but also to preserve the functions of that wondrous organ of hearing. The author has kept faith in conveying much up-to-date knowledge relating to every known form of ear diseases. No other text-book contains so much valuable information as to the structure of the ear.

Such anatomical and physiological knowledge is absolutely essential in the practice of modern otology. Even though the author offers his "hard-won knowledge," a rather extensive and informative bibliography is appended to every chapter.

Child-life is especially prone to ear affections, with some tragic sequels. Many such calamities are avoidable. A special secretion (part xi) is rightfully devoted to "Otology in Children."

Infants have a large cell back of the middle ear, the antrum. Infancy presents no well-defined mastoid pneumatic structure. The reviewer, however, agrees with Keller that mastoid antritis is quite common in early life. Pediatrician and otologist must recognize this clinical fact, if they would reduce the still too high mortality of intra-cranial complications from ear infections in early childhood. Medico-legal otology is given unusual attention. Doctors usually cut such a sorry figure in giving expert testimony, that such a discussion is eminently practical and timely. The question of a "Discharge from the Ear" is a vital one in life insurance examination. The insurance aspects of the ear have been found worthy of a separate, well-covered chapter, reinforced by an invaluable bibliography relating to this pause of our otologic practice.

The request from colleagues and students to "write a book yourself," certainly brought forth a work which presents a personal experience well worthy of permanent record. We recommend Keeler's Otology to the fully initiated, and especially to the neophyte in this very important and difficult field.

HOMER DUPUY, M. D.

Practical Materia Medica: By Clayton S. Smith, Ph. D., M. D., and Helen L. Wikoff, Ph. D. Philadelphia, Lea & Febiger. 1929. pp. 300.

The authors have prepared in this introductory text for the student of pharmacology a book which is satisfactory in every respect. The work is divided into several sections, the first of which contains a dissertation on various methods by which drugs may be administered, together with the dosage of drugs. The next section deals with inorganic materia medica, the succeeding one with organic materia medica. The succeeding part is devoted to toxicology, and is followed by the section on prescription writing, and lastly an appendix which deals with the preparation of reagents. The author has written in a rather staccato, dogmatic style, but this does not in any way detract from the value of the work. In truth it rather enhances it, as the statements do not need more than a mere declaration without elaboration, and if they are short, brief, succinct, and to the point they are remembered best by the student.

J. H. MUSSER, M. D.

The Normal Diet: By W. D. Sansum, M. S., M. D. 3rd ed. St. Louis, C. V. Mosby Company. 1930. pp. 134.

A most excellent exposition of the important features of diet; written primarily for physicians but in such form that it may be available for the patients that consult the physician. Many of the statements expressed by Sansum do not meet with the full accord of others interested in the science of nutrition, but under any circumstances his ideas and suggestions are most stimulating.

J. H. MUSSER, M. D.

Medical Gymnastics and Massage in General Practice: By J. Arvedson. 3rd ed. Philadelphia, P. Blakiston's Son & Co. Inc. 1930. Pp. 298.

This small volume is evidently designed to review in a very elementary way many of the most common orthopaedic, medical and surgical diseases. The treatment of the various subjects is so elementary that it is a suitable volume only for nurses and those just beginning any medical subject. The theories advanced in connection with the causes and treatment of the diseases considered are apparently sound and up to date. In this connection, it is interesting to note the remarks in reference to the early treatment of fractures, which is not yet commonly practiced in this county, thus resulting in many joint limitations.

The most just criticism of the volume seems indicated, as is so frequently the case in volumes on exercise and massage, the authors claim remarkable results in conditions which could not possibly be influenced by such treatment, such as, pneumonia, diabetes, etc., etc. In this connection, it would therefore wrongly influence the beginner in medicine and, I think, should be condemned as a work referred to the early student's consideration.

JOHN T. O'FERRALL, M. D.

Selected Readings in Pathology: Ed. by Esmond R. Long. Springfield, Ill. Charles C. Thomas. 1929. Pp. 301.

This volume consists of a well chosen selection of interesting extracts from many of the medical classics. Beginning with the classical treatise on "Air, Waters and Places" by Hippocrates in the fourth century, B. C., the history of the development of pathology is progressively illustrated by

excerpts from the works of such men as Celsus, who gave the classical description of inflammation about 30 B. C. to 38 A. D., Galen with his discussion of kidney calculi and abscesses, William Harvey who first described the circulation of the blood, John Hunter with his work on venereal disease, Laennec, the first to use auscultation, Thomas Hodgkin, with his description of the disease known by his name; Thomas Addison, known for his syndrome in which the suprarenals are concerned, and finally, Rudolf Virchow, 1821 to 1902 with his immortal work on cellular pathology.

The author has selected his material with much forethought, producing a book which fills a decided want in medical literature and which is a veritable pleasure to read.

EDWIN H. LAWSON, M. D.

Introduction to the Study of the Nervous System: By E. E. Hewer, D. Sc. (Lond.) and G. M. Sandes, M. B., B. S. (Lond.), M. R. C. S., L. R. C. P. St. Louis, C. V. Mosby Co. 1929. Pp. 104.

The Nervous System, by Hewer and Sandes, is an excellent manual for the primary study of neurology. It is liberally illustrated with splendid diagrams and cuts, and affords a quick and ready method of looking up various points. It is primarily written, as the introduction states, for the use of students. It should be a valuable book, however, for any one who, from time to time, should want to look into the symptomatology of nervous reactions.

E. McC. CONNELY, M. D.

The Mechanism of the Heart and Its Anomalies: By Emile Géraudel. English translation by L. F. Bishop and L. F. Bishop, Jr. Baltimore, The Williams & Wilkins Company. 1930. Pp. 266.

The chapter on the anatomy of the specific myocardium and the numerous figures should make this volume useful to the electrocardiographer. As to the rest, with the exception of the chapter on the electrocardiograph (Boulitte), it is written in support of the author's theory of the mechanism of the heart beat. This theory involves four fundamental assumptions.

1. The sinus and atrioventricular nodes are absolutely independent in their action; the former initiating the auricular, the latter, the ventricular systole. In other words, there is alway complete dissociation of auricle and ventricle.

2. Normally the activity of each node is begun by the arrival of the pulse wave. Since the branch of the coronary artery to the sinus node is shorter than that to the atrioventricular node, the former precedes the latter.

3. All the fibers of the two atria contract at the same moment, and all parts of the two ventricles are thrown into activity simultaneously at a later moment. It follows that all ideas of impulse conduction are illusory.

4. Every auricular systole, whether in normal rhythm, in premature beats, in flutter or in fibrillation, is initiated in the sinus node. All ventricular beats similarly originate in the atrioventricular node. The peculiar electrocardiographic configuration of ventricular premature beats is not, therefore, due to abnormal site of origin.

It follows from these assumptions that the classical method of interpreting the electrocardiogram is wrong. There can be no heart block, partial or complete, because there is no conduction. For the same reason there are no circus contractions, as is generally believed, in auricular flutter or fibrillation. There is no "nodal" rhythm, since the A-V node is pacemaker of the ventricle, never of the auricle. Electrocardiographic interpretation, therefore, becomes delightfully simple. One merely observes the independent auricular and ventricular rhythms, whether they are equal or not, whether either or both are accelerated, normal or retarded in rate, and whether they are regular or irregular. A new terminology is devised for the specialized tissues and for the anomalies in the cardiac mechanism.

If space permitted, a tremendous body of evidence might here be advanced against every one of Géraudel's assumptions. At the same time the positive evidence in favor of them is practically negligible. His chief argument, which he regards as proof of his theories, is that interference with the blood supply to either node will slow its rhythm. Unfortunately for his proof this is exactly what would be anticipated on the basis of the classical view. As for the remainder of his evidence it is chiefly destructive; he attempts to show that the generally accepted conceptions are inadequate. In the opinion of the reviewer these efforts are quite unsuccessful.

RICHARD ASHMAN, Ph. D.

Diseases of the Liver, Gallbladder and Bile Ducts: By Sir Humphry Rolleston, Bart, C. B., and John William McNee, D. S. O., M. D., D. Sc., F. R. C. P. London, Macmillan & Co. 1929. Pp. 884.

A lapse of seventeen years has occurred since the publication of the last edition (second) of this authoritative test on the liver. For many years we have lived in anticipation of the forthcoming of the new volume. As in previous editions, this book is replete with every known disease of the liver and, in addition, the gall-bladder comes in for its share of discussion vieing with the numerous studies on the organ in recent years. The latest functional tests for liver and gallbladder are accurately described and the work is brought up to modern standard. The original studies on jaundice by one of the authors (McNee) and the latter's investigations on liver function stimulates interest on the part of those concerned with the digestive glands.

Certain objections to the volume are not in its contents. It is poorly bound and the type too small for comfortable reading.

DANIEL N. SILVERMAN, M. D.

Gastric and Duodenal Ulcer: By Arthur F. Hurst M. A., M. D. (Oxon.) F. R. C. P. and Matthew J. Stewart, M D. (Glasg.) F. R. C. P., London, Oxford University Press. 1929. Pp. 544.

The first edition of this magnificent work is to be commended. Peptic ulcer (gastric and duodenal) is covered in all of its phases. This monograph contains eleven parts, each one being a complete treatise on a different aspect of ulcer, the acute and the chronic.

This book is comprehensible and the discussion, especially the part on Pathology and Pathological Anatomy, are accompanied by clear illustrations, some in colors.

The investigations, both surgical and medical, of foreign authors, and particularly the American, are liberally quoted.

The fundamental basis for the proper understanding of any medical condition is well demonstrated in this book by the space that is allotted to its pathology. In fact, the book is made much more valuable by the co-authorship of a pathologist who is well versed in the subject.

The chapter on radiological investigations, undoubtedly the method second in importance to the clinical diagnosis, emphasizes the "niche" as the most essential criterion in the x-ray diagnosis of peptic ulcer. Without the niche these authors contend that it is quite impossible to determine what part is played by the contaction of scar or by spasm on a duodenal deformity.

The parts on treatment are complete and the surgical and medical sides of the question are given the reader. A co-operative plan is wrought with the most beneficial results.

DANIEL N. SILVERMAN, M. D.

Review of Clio Medica—1. *The Beginnings—Egypt and Assyria:* By W. R. Dawson, F. R. S. E. 2. *Medicine in the British Isles:* By Sir D'A. Powers, K. B. E., F. R. C. S., England. New York, Paul B. Haeber, Inc. 1930.

This series, as is indicated on the title page, is composed of primers on the History of Medicine. They are pocket size volumes and are written by authoritative authors. They are entertaining and replete with much medical informations. Their advantage is their brevity, and each can be read in one or two hours. The titles are self-explanatory and they satisfactorily fulfill the requirements necessary for a good book. The editor of the series is E. B. Krumbhaar, M. D. This in itself speaks for the high quality of the work. Several more volumes in the series are in preparation.

I. D. ROBBINS, M. D.

PUBLICATIONS RECEIVED.

The MacMillan Company, New York: The Mycoses of the Spleen, by Alexander George Gibson, M. D., F. R. C. P.

Paul B. Hoeber, Inc., New York: Anatomy, by George W. Corner, M. D.

J. B. Lippincott Company, Philadelphia and London: Tropical Medicine in the United States, by Alfred C. Reed, M. D. Burns, by George T. Pack, B. S., M. D. and A. Hobson Davis, B. S., M. D. Feeding in Infancy and Childhood, by I. Newton Kugelmass, M. D., Ph. D., Sc. D.

P. Blakiston's Son & Co., Inc., Philadelphia: Refraction of the Human Eye and Methods of Estimating the Refraction, by James Thorington, A. M., M. D. Tropical Medicine, by Sir Leonard Rogers and John W. D. Megaw. Text-Book of Histology, by J. Lewis Bremer, M. D.

Williams & Wilkins Company, Baltimore: Behavior Patterns of the Alimentary Tract, by T. Wingate Todd, M. D., Ch. B., F. R. C. S.

Houghton Mifflin Company, Boston and New York: The Baby's First Two Years, by Richard M. Smith, A. B., M. D., Sc. D.

Gaston Doin & Cie, Paris: Les Urticaires, by Edouard Joltrain. Le Diabete Sucre, by P. A. Carrie.

The Bobbs-Merrill Company, Indianapolis: Doctors and Specialists, by Morris Fishbein, M. D.

Miscellaneous: United Fruit Company, Medical Department, Eighteenth Annual Report, 1929. The Carlsbad of America, by W. E. Fitch, M. D.